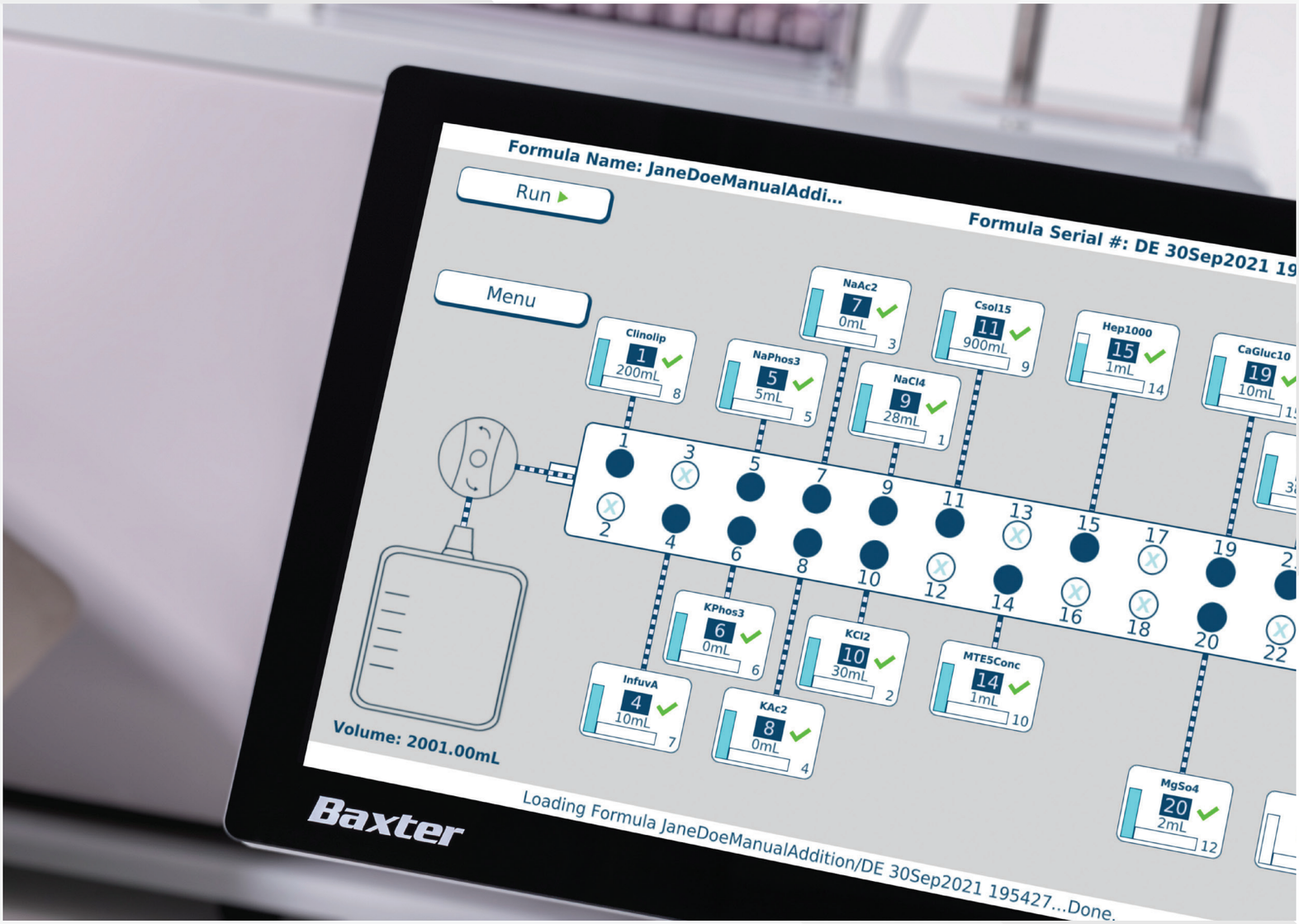


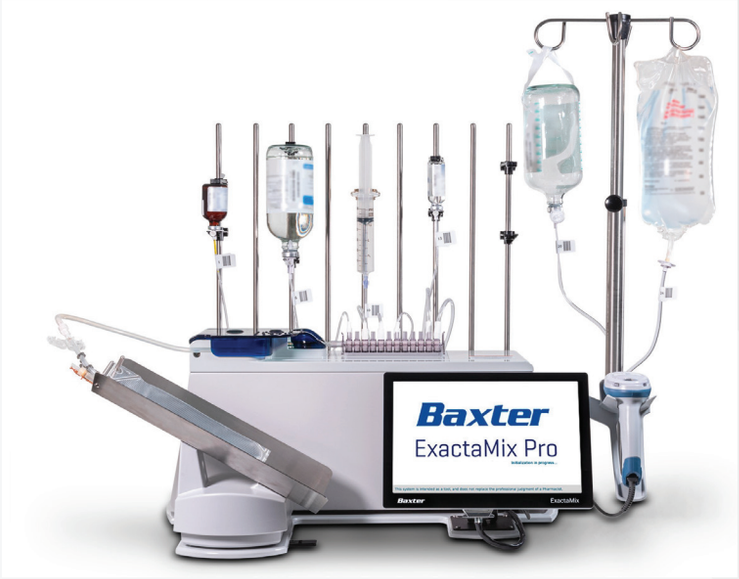
Baxter

ExactaMix Pro

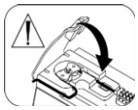
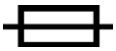
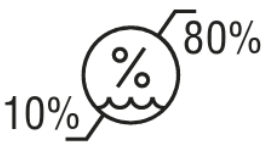
AUTOMATED COMPOUNDER

EM2400

OPERATOR MANUAL



SYMBOLS ON THE COMPOUNDER

	Power button		Power light
	Load cell		Display
	Pump door must be closed to operate		Warning / Caution
	USB port		Ethernet port
	Reset button		Protective ground (earth) terminal
	WARNING! USA Federal law restricts this device to sale, distribution, and use by or on order of a physician.		Fuse
	Serial Connection to Display		Do not use if package is damaged
	Australian Communications and Media Authority regulatory compliance mark		Wireless communications
	European conformity		Reference operator's manual
	Manufacturer		Manufacturing date
	Humidity limitations		Temperature limitations

	Not made with natural rubber latex		A separate waste collection is required for Waste of Electrical and Electronic Equipment (WEEE)
	Catalogue number		Serial number
	Taiwan National communication commission conformity		Underwriters Laboratory listed
	United Kingdom (UK) Importer		United Kingdom (UK) Conformity Assessed

For use with the following product codes REF**:**

Main Module	EXACTA-M ; 2400-M
Load Cell	EXACTA-LC ; 2400-L
Display Module	EXM24DY; EXME24DY
Vial Rack	EXACTA-VS; EXACTA-VLS; EXACTA-VL; EXACTA-V
Base Plate	2400-B

All the refurbished product codes of above modules are also applicable to this manual.

TERMS IN THIS MANUAL

WARNING
Indicates a risk of personal injury or patient harm if the instructions are not followed

CAUTION
Indicates a risk of damage to equipment or data if the instructions are not followed

IMPORTANT! Provides important information

NOTE: Provides additional information

Tip! Provides a recommendation

In the electronic version of this manual, underlined text and Table of Contents entries provide hyperlinks to other sections.

TABLE OF CONTENTS

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INTRODUCTION

The Baxter **ExactaMix Pro** 2400 Compounder is an automated pumping system that compounds multiple sterile ingredients into a finished solution in a single patient bag. Using a formula provided electronically or entered manually, the compounder withdraws a specified volume of each ingredient from its source container in a specified sequence, and pumps each ingredient into a patient bag. The finished solution is delivered to patients intravenously.

NOTE: Pictures in manual are for reference only, the main module pump cover may appear in a different color.

You can use the compounder to compound solutions such as:

- Total Parenteral Nutrition (TPN)
- Continuous Renal Replacement Therapy (CRRT)
- Cardioplegia
- Base solutions
- Epidurals

WARNING

The compounder software is not intended to replace the professional judgment or knowledge of a pharmacist or pharmacy technician.

WARNING

Operators should be trained according to this manual before using the **ExactaMix Pro** compounder.

COMPONENTS

HARDWARE COMPONENTS

The compounder consists of these main hardware components:

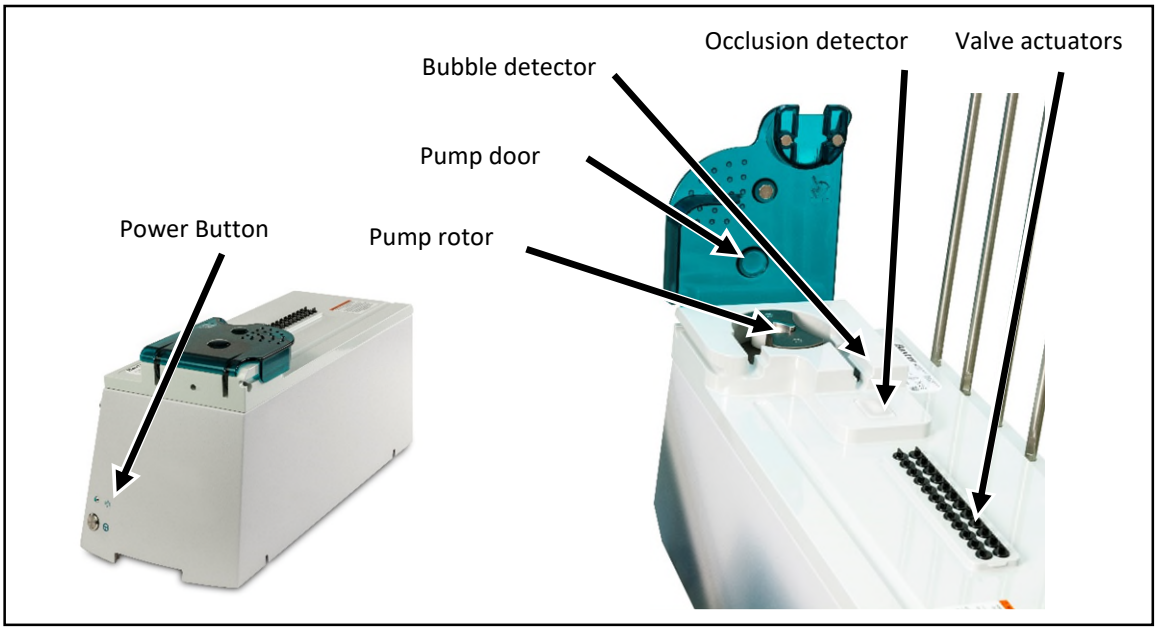
Hardware components

NOTE: The vial rack extension (optional) and the printer (North America only) are not shown.

The **main module** contains the moving parts of the compounder, including these parts:

- The **valve actuators** open and close as needed to allow the delivery of individual ingredients. When the pump is paused, the valve actuators automatically close.

- The **occlusion detector** detects occlusions (blockages) in the tube between the source containers and the detector.
- The **bubble detector** detects air bubbles as they pass through the tube over the detector.
- The **pump door** allows access to the pump rotor.
- The **pump rotor** moves the fluid from the valve set to the destination bag.



Main module, with close-up view of the top

The **load cell** weighs each destination bag and sends this measurement to the display, where calculations are performed. A 2,000 g calibration weight for use in calibrating the load cell is provided with the compounder.

Load cell

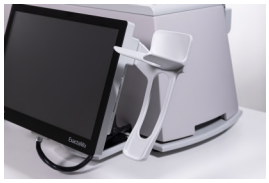
The **display** operates the compounder software and includes a touch screen for data entry. The bottom and the side of the display contains two USB ports each, which can be used to connect a barcode scanner, keyboard, mouse, and printer or USB drive. The bottom of the display also contains one Ethernet port.

Display

The **display cable** is a serial cable that provides communication between the main module and the display module.

Display cable

The **scanner holder** is attached to the right side of the display module. It stores the barcode scanner when it is not in use.



Scanner holder

The **barcode scanner** is stored on the right side of the display. This scanner is used to scan barcodes on the labels of source containers, inlets and patient bags.

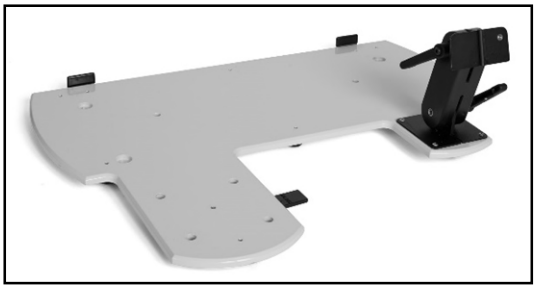
The barcode scanner model may vary.

Barcode scanner

The **vial rack** attaches to the main module. Adjustable **vial holders** and **syringe holders** attach to the vial rack.

Vial rack

The **base plate** is the common base on which the compounder's components are mounted.



Base plate

A laser **printer** (North America only), used for printing reports and labels, can be connected directly to the display or to a network.

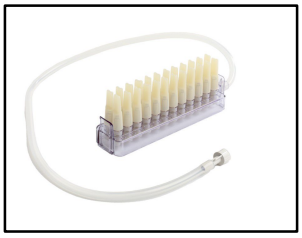
Printer models may vary.

Printer

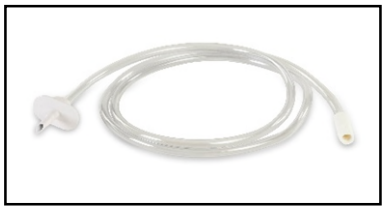
DAILY USE COMPONENTS

- The **valve set** is a sterile, multiple-port valve with an outlet tube attached. The valve body fits over the valve actuators on the compounder, protecting them from damage. The outlet tube attaches to the destination bag. For ordering information, refer to Valve Sets on Page 17.
- The **inlet** is a sterile tube with a spike or Luer end attached. The spike or Luer end attaches to a source container, and the other end attaches to a port on the valve set. The type of inlet that is used depends on the source container. For inlet types, descriptions and ordering information, refer to Inlets on Page 17.

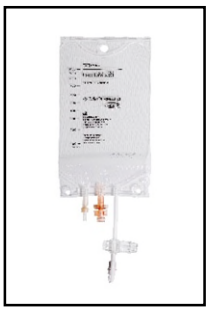
  NOTE: The valve set and inlets are collectively known as the tube set.
- The **destination bag** is a sterile container that holds the fluid pumped from the source containers. There are two main types of destination bags, available in different sizes. See Bags on Page 18 for bag descriptions and ordering information.
  - The **patient bag** is used for delivering the finished solution to a patient. This bag has three ports for filling the bag, adding ingredients manually and delivering the finished solution.
  - The **calibration bag** is used for collecting any fluid that is not intended for a patient. Such as while calibrating and priming the compounder. This bag has only one port for filling the bag. The calibration bag is available in North America only.



Valve set



Inlet



Patient bag

Calibration bag

SOFTWARE

Baxter **ExactaMix Pro** 2400 Operating Software is installed on the compounder display.

To comply with regulations of the United States Food and Drug Administration (FDA), the compounder has been validated and approved for use only with the software that Baxter Healthcare Corporation provides.

License

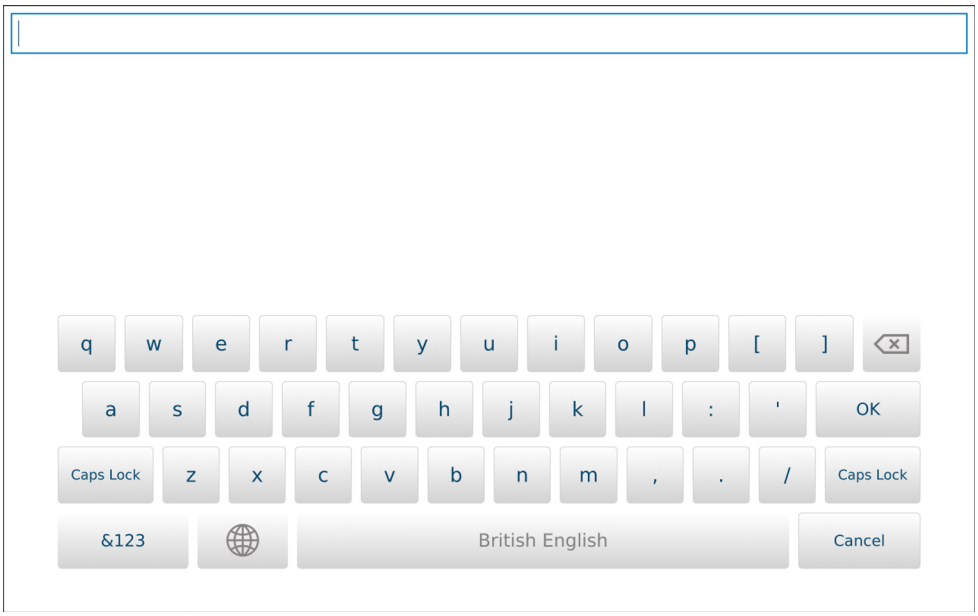
The license to use the compounder software is granted to a single concurrent user on a single **ExactaMix Pro** 2400 Compounder for the term of the equipment contract. Baxter retains ownership of the software. Distribution or copying of this software, other than for backup purposes, is expressly forbidden.

Permissions

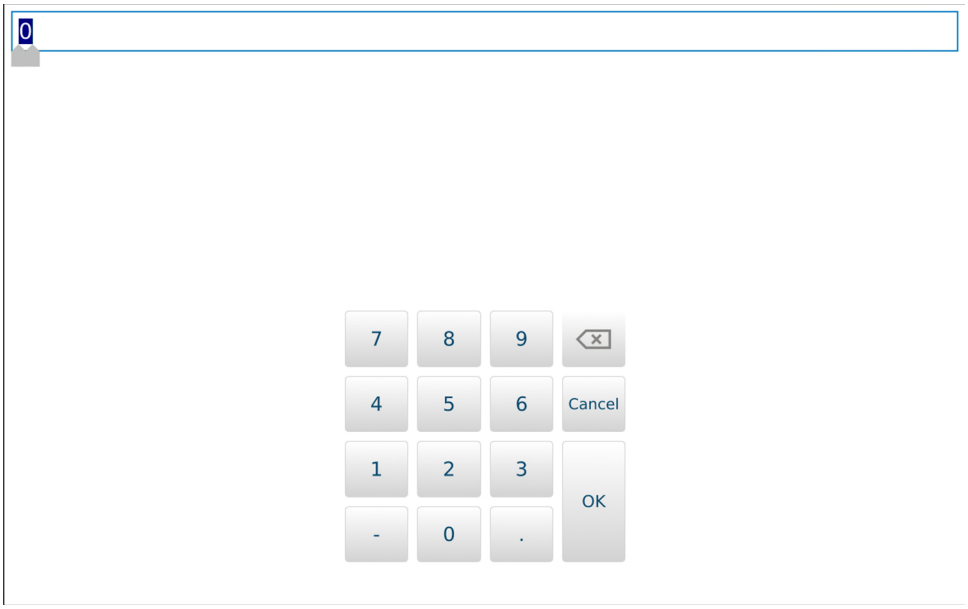
The options that appear in the software depend on the permissions granted to the user. If you have questions about your permissions, contact your supervisor. For more information about setting up permissions, refer to Setting Up the Users on Page 125.

Navigation

On any screen or window that requires data entry, tapping a field displays an on-screen keyboard or number pad that allows you to enter characters.



On-screen keyboard



On-screen number pad

Menu Screen

The menu screen provides access to menus and settings.

Menu screen

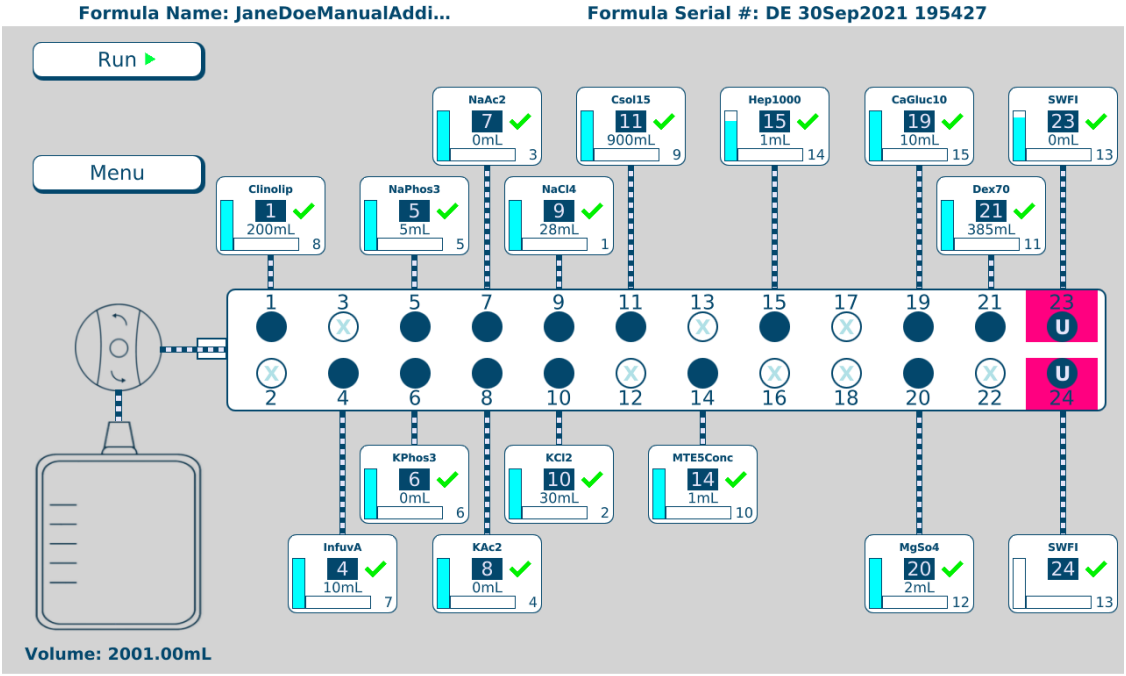
The menu screen has the following six options:

- **File** menu: allows formula management, software log in/logout/exit, compounder restart or compounder shutdown.
- **Edit** menu: for editing the configurations, formulary, ingredient groups, inlet information and bag information
- **Compound** menu: sets up the compounder for operation, selects a formula to compound and manage ingredients
- **Tools** menu: sets up options related to the system, users, security, directories used for saving certain files. and software maintenance.
- **Reports** menu: allows users to view, print and export reports related to compounding and other device activity.
- **Help** menu: provides tutorials and information about the hardware and software.

Tapping **Close** at the bottom right displays the pump screen (or a similar screen during the setup process). You can also display the pump screen by selecting certain functions, such as those on the **Compound** menu.

Pump Screen

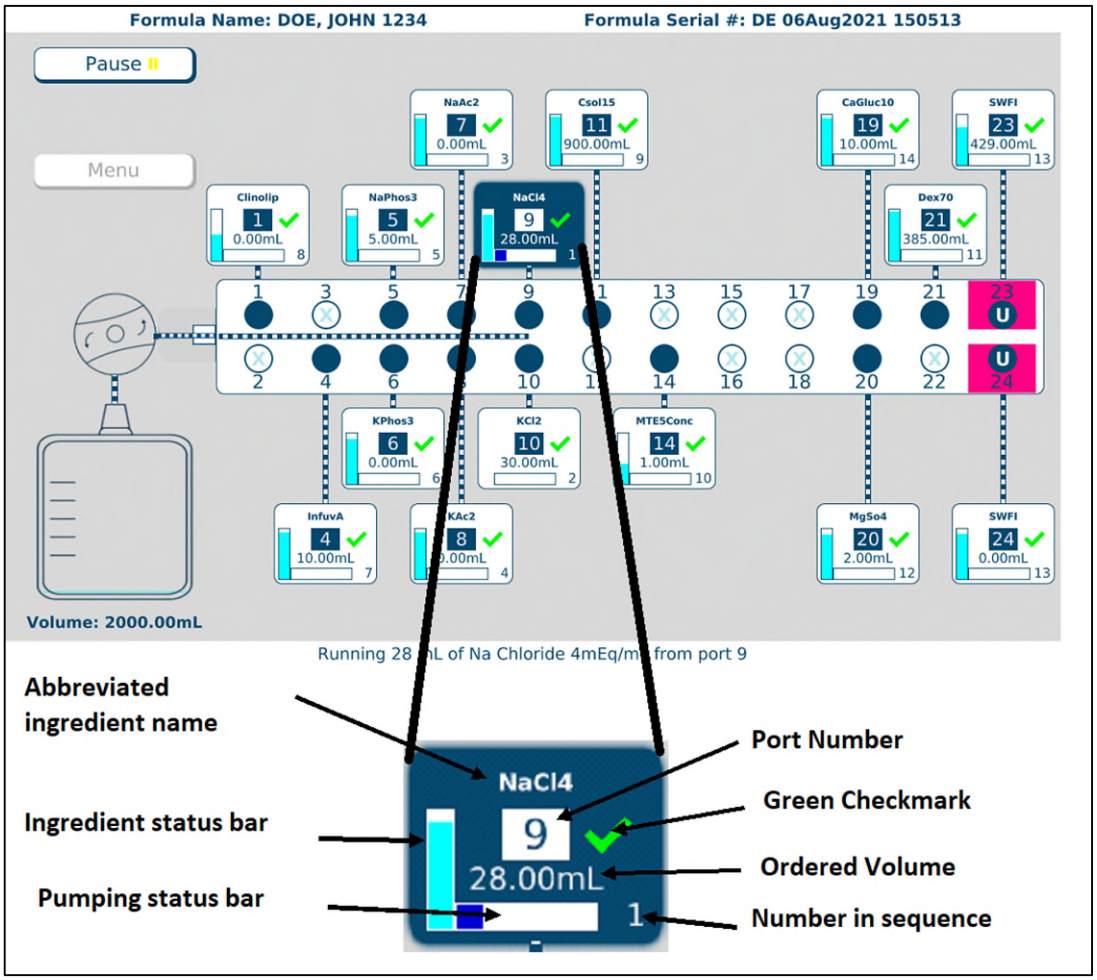
The pump screen shows a diagram of the valve set. It is used during the compounding process. Similar screens are used during setup.



Pump screen at the start of the compounding process

The appearance of the pump screen changes slightly during various steps of the compounding process. However, the screen always includes these elements:

- The Formula: <formula name / patient name> and Serial #: <serial number> appear at the top of the screen.
- Buttons appear on the left side of the screen. Tapping **Run** starts the compounding process. Tapping **Menu** displays the menu screen.
- The total volume to be pumped for the order appears under the bag in the lower left corner.
- A diagram of the valve set with numbered ports appears in the middle of the screen. Ports that:
    - Have no ingredient attached have an X over them
    - Have an ingredient attached have an ingredient button connected
    - Have the Universal Ingredient attached are identified by a **U**
    - Make up an electronic Y-site are identified by colored highlighting



Ingredient button details

On the pump screen, each ingredient button includes:

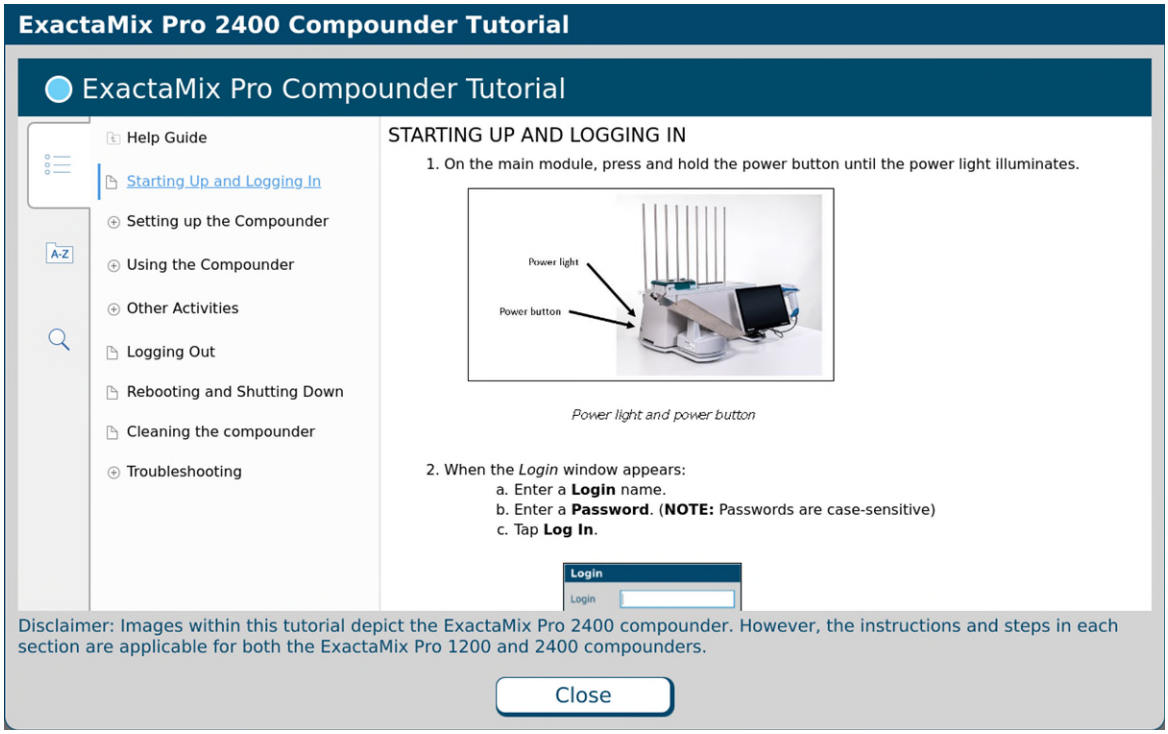
- The abbreviated ingredient name
- The port number
- A green check mark indicating that the inlet and port have been verified, or a red X indicating that they need to be verified.
- The ordered volume of the ingredient
- A number indicating the ingredient's place in the compounding sequence
- A vertical bar showing how much of the ingredient remains in the container. during compounding, this bar decreases as the remaining volume decreases.
- A horizontal bar showing how much of the ingredient is being used for the current order. During the compounding process, this bar increases as the pumped volume increases.

When an ingredient is being pumped, its button is shown in blue. An animation shows fluid moving through the inlets and the outlet tube into the destination bag. Horizontal marks across an inlet represent fluid, indicating that this inlet has been primed.

Tutorials

The compounder software includes step-by-step tutorials about setting up the compounder. To view the tutorials:

1. At the menu screen, tap **Help > Tutorials**.
2. At the tutorials window:
    - With the **Contents** button, tap a topic to display the associated help content.
    - With the **Index** button, enter and search for keywords.
    - With the **Search** button, search any topics



Tutorials window

FEATURES

SUMMARY OF FEATURES

The compounder:

- Accepts formulas created by order-entry software via 2D Formula Barcode/PAT/FRM file interface, or by direct entry on the compounder
- Uses barcodes on the source containers and inlets to promote proper setup
- Includes software with a Setup Wizard to guide users through the setup process
- Supports a maximum of 24 ingredients, source containers in volumes of 10–5,500 mL and destination bags in volumes of 125–5,000 mL
- Allows attachment of the same ingredient to more than one port, creating an electronic Y-site
- Allows specification of the sequence in which ingredients are pumped
- Allows specification of accuracy limits for the finished solution
- Uses volumetric delivery, gravimetric verification, and automatic calibration to help ensure delivery accuracy
- Uses a bubble detector and occlusion detector
- Can be immediately stopped by lifting the pump door
- Can track ingredient lot numbers and ingredient expiration dates
- Generates a MixCheck Report for each finished solution
- Can be set up to communicate with a printer
- Can print reports and barcode labels at the compounder's printer
- Can be set up to communicate with the order entry system through a wired or wireless network
- Allows users to identify facility specific ingredients in the formulary
- Allows authorization of MixCheck reports online

ORDER ENTRY

Order entry can be done through direct entry (see Page 77), or by using separate order-entry software.

The **ExactaMix Pro** compounder operating software can communicate, via a network, with order-entry software on a separate computer. The order-entry software must produce a .PAT/.FRM file and a corresponding barcode. Scanning the barcode at the compounder retrieves the .PAT/.FRM file.

Alternatively, the order-entry software must be able to produce a formula label, containing the formula details in the 2D barcode. Scanning the 2D barcode loads the formula onto the compounder. For more information, refer to Fulfilling the Order (Basic Process) on Page 70.

FORMULARY

The formulary is the list of ingredients, and associated products, that may be attached to the compounder.

An ingredient is a solution of a specific chemical entity at a specific concentration regardless of container size, container type or manufacturer. One ingredient can have several associated products. An ingredient can be made available or unavailable by authorized users.

A product is an ingredient in a particular container size and type from a specific manufacturer. Several products can be associated to one ingredient group. When an ingredient is set to be unavailable, all associated products also become unavailable.

For example:

- Ingredient: Dextrose 70%
- Products:
    - Baxter Dextrose 70%, 2000 mL bag
    - Baxter Dextrose 70% 1000 mL bag

INGREDIENT GROUPS

An ingredient group is a list of chemically similar ingredients. For example:

- Ingredient group: Phosphate

  Ingredients: K Phos 3 mMol/mL, Na Phos 3 mMol/mL
- Ingredient group: Calcium

  Ingredients: Ca Gluconate 10%, Ca Chloride 10%

Some ingredients can tolerate each other's presence in the finished solution but must be separated during compounding to ensure that they do not mix within the common fluid pathway, or within the patient bag in the absence of sufficient volume. These ingredients are considered to be incompatible. For example, calcium and phosphate should not be mixed in their concentrated forms (in the absence of amino acids) or a precipitate will immediately result. The compounder will pump ingredients from incompatible ingredient groups only if it can pump a user-specified volume of another ingredient between them.

Each ingredient group has a list of other groups with which it is incompatible. When ingredients are assigned to these groups, the software can detect formulas in which incompatible ingredients are not sufficiently separated.

UNIVERSAL INGREDIENT

When a patient bag is removed, approximately 25 mL of the last ingredient pumped remains in the common fluid pathway. This ingredient then becomes the first ingredient to enter the next patient bag when the next solution is compounded. Because this ingredient must be suitable for all formulas, it is called the Universal Ingredient (UI).

Each formula must include enough UI volume to allow a final flush, which flushes all previous ingredients into the patient bag. Regardless of the total volume of the UI to be delivered, the

compounder reserves enough UI volume to perform a final flush at the end of the compounding process. You can change the volume used for the final flush when creating a configuration.

The UI is specified by the facility and is typically water or dextrose.

CONFIGURATION

A configuration identifies the products that will be attached to the ports, the sequence in which they will be pumped, any allowable auto-additions, the ingredient and volume to use for any ingredient flushes, the Universal Ingredient and the volume to use for the final flush.

BARCODE VERIFICATION

WARNING

It is important to use a barcode scanner for scanning labels during verification of the setup.

For the barcode verification to be effective, it is critical that the configuration be set up properly. For instructions, refer to Attaching the New Ingredients and Inlets on Page 45.

During daily setup, or when a source container must be replaced, the software guides you through a process of barcode verification. You scan a barcode label on each inlet and each associated source container to verify that the inlet is attached to the correct container.

Each inlet must be labeled with a barcode that identifies the port to which the inlet is attached. These barcode labels are packaged with the valve set. The compounder software can also generate a report that makes these labels available for printing.

Most source containers already have a manufacturer's barcode label attached. For containers that are filled or diluted in the pharmacy, the compounder software can also generate a report that makes these labels available for printing.

Tip! Baxter strongly recommends using the manufacturer's barcode whenever possible.

MEASUREMENT OF VOLUME AND WEIGHT

The compounder uses volumetric delivery to move fluid, with gravimetric verification to check the final weight of the destination bag. The compounder also performs an automatic calibration to maintain delivery accuracy.

Volumetric Delivery

The pump rotor moves as it pumps an ingredient into the destination bag. The amount of movement determines the volume that is delivered.

Automatic Calibration

The pump is calibrated with water. A flow factor associated with each ingredient adjusts the flow of that ingredient compared to the flow of water. The flow factor accounts for the ingredient's viscosity, the size and type of its source container, its inlet, its venting and other factors that affect its delivery. As a result, calibrating with water automatically calibrates the compounder for use with all the other ingredients.

Every time the rotor pumps an uninterrupted delivery of 175 mL or more of water, the compounder automatically performs a calibration of the rotor movement. Automatic calibration maintains the rotor's accuracy and reduces the need for manual adjustments.

Gravimetric Verification

The compounder provides feedback about its delivery accuracy by weighing the finished solution and comparing that weight to the theoretical weight of a perfectly compounded solution. This theoretical weight is computed by this formula:

$$\Sigma\ (\text{Volume}_{\text{Ingredient}} \times \text{Specific Gravity}_{\text{Ingredient}})$$

PRINTING OPTIONS

The printer is used for printing reports and creating labels for inlets and source containers. The printer can use standard 8.5 x 11 in. (21.6 x 28 cm) letter paper size for reports and **Avery** 6460 label sheets or equivalent for inlet labels.

To use A4 paper size, navigate to the *Options window* by selecting **Tools > Options**. Select the *directories* tab. Then in the report's section select Standard Report (A4 paper size) from the drop-down menu.

You can connect the printer to a:

- USB port on the display
- USB port on the order-entry computer, for use on a network
- Network via an Ethernet cable

The compounder software includes the printer drivers.

IMPORTANT!
Use only Baxter-authorized printers with the compounder. For a list of Baxter authorized printers, refer to ExactaMix Pro System Requirements Guide.

NETWORK CONNECTIVITY

You can connect the compounder via an Ethernet cable or wireless connection to a:

- Facility network
- Mini-net that is typically shared only with the order-entry computer and the compounder's printer

The compounder uses the network only to retrieve .PAT/.FRM files, send print jobs, and back up the database.

Baxter does not support network-related equipment, nor activities related to setting up or troubleshooting network connectivity for the compounder.

Tip! If you connect the compounder to a network, Baxter recommends taking precautions to minimize the compounder's exposure to cyber threats. Refer to Baxter **ExactaMix Pro** Cybersecurity Guide document for more information about network security or contact Baxter Technical Support. Refer to Getting Help on Page 20.

WARNING

Cybersecurity is a shared responsibility. The following guidance should be considered during implementation and use of your **ExactaMix Pro** compounder. For further guidance, refer to the **ExactaMix Pro** Cybersecurity Guide which can be found at Baxter's Product Security website www.baxter.com/product-security.

- Physical access to the device should be limited to only authorized users
- Prepare and perform training for personnel, cautioning them against credential sharing
- Ensure that IT maintains cybersecurity of the facility's environment around the device by performing the following:
  - Network segmentation
  - Firewalling each network segment, limiting inbound and outbound connections
  - Scanning for unauthorized network access
  - Scanning for vulnerabilities and viruses

If you have discovered a potential vulnerability related to the **ExactaMix Pro** product, please report this information to productsecurity@baxter.com or call +1-888-887-0098 (if calling from the U.S.).

ORDERING SUPPLIES

Order supplies through normal channels. For U.S./Canada, you can contact Baxter Customer Service at +1.800.567.2292. For all other countries, find your local customer service contact details by visiting www.baxter.com/location-selector , selecting your location and using the contact link.

WARNING
Use only sterile inlets, bags and valve sets validated by Baxter.

VALVE SETS

The following valve sets are approved for the **ExactaMix Pro** compounder.

Product	Order Number	Quantity / Case	Notes
EM2400 Valve Set	H938**724**	10	Includes: • Numbered inlet labels with barcodes • 10 calibration bags (H938735RS)
EM2400 Valve Set– **Except Calibration bags**	H938**724E**	10	Includes: • Numbered inlet labels with barcodes

Baxter valve sets are sterile, bio-compatible, non-pyrogenic, non-DEHP and contain no natural rubber latex components.

NOTE: Valve Set caps may have a different color than shown in this manual.

INLETS

The following inlets are approved for use on the **ExactaMix Pro** compounder.

Product	Order Number	Quantity / Case	For use with:	Standard Priming Volume	Minimum Priming Volume
Non-vented High-Volume Inlet	H938**173**	25	Large-volume, vented or collapsible containers (such as bags of dextrose and water)	50–60 mL	25–30 mL
Vented High-Volume Inlet	H938**174**	25	Large-volume, non-vented containers that require a spike to vent air into the container	50–60 mL	25–30 mL
Vented Micro-Volume Inlet	H938**175**	25	Small-volume vials	5–6 mL	2.5–3 mL
Micro-Volume Inlet, with Large-Bore Spikes	H938**751**	25	Small-volume bags or bottles that require a large-bore spike	5–6 mL	2.5–3 mL
Syringe Inlet	H938**176**	25	50 or 60 mL Luer syringes (regardless of the volume they contain)	5–6 mL	2.5–3 mL

Baxter inlets are sterile, bio-compatible, non-pyrogenic, non-DEHP and contain no natural rubber latex components.

NOTE: The compounder will automatically use the highest available value for the standard priming volume and half of that value for the minimum priming volume. However, you can adjust these priming volumes in the Inlet Editor. For instructions, refer to Using the Inlet Editor on Page 155.

BAGS

The following empty bags are approved for the **ExactaMix Pro** compounder.

Product	Product Code	Quantity / Case	Notes
ExactaMix EVA Container, 250 mL	H938**737**	50	N/A
ExactaMix EVA Container, 500 mL	H938**738**	50	N/A
ExactaMix EVA Container, 1000 mL	H938**739**	50	N/A
ExactaMix EVA Container, 2000 mL	H938**740**	50	N/A
ExactaMix EVA Container, 3000 mL	H938**741**	50	N/A
ExactaMix EVA Container, 4000 mL	H938**742**	50	N/A
ExactaMix EVA Container, 5000 mL	H938**743**	50	N/A
ExactaMix EVA Calibration Bag, 1000 mL	H938**735**	50	Can be used for functions other than calibration; refer to calibration bag on Page 6.
EVA Dual Chamber Container, 1500 mL	H938901	42	250 mL upper chamber 1250 mL lower chamber
EVA Dual Chamber Container, 3000 mL	H938905	42	500 mL upper chamber 2500 mL lower chamber
EVA TPN BAG, INT THR, 250 mL	E3002OD	50	mfr. Haemotronic
EVA TPN BAG, INT THR, 250 mL (5 pack)	E3002OD5	50	mfr. Haemotronic
EVA TPN BAG, INT THR, 500 mL	E3005OD	50	mfr. Haemotronic
EVA TPN BAG, INT THR, 500 mL (5 pack)	E3005OD5	50	mfr. Haemotronic
EVA TPN BAG, INT THR, 1000 mL	E3010OD	50	mfr. Haemotronic
EVA TPN BAG, INT THR, 1000 mL (5 pack)	E3010OD5	50	mfr. Haemotronic
EVA TPN BAG, INT THR, 2000 mL	E3020OD	30	mfr. Haemotronic
EVA TPN BAG, INT THR, 3000 mL	E3030OD	30	mfr. Haemotronic
EVA TPN BAG, INT THR, 4000 mL	E3040OD	30	mfr. Haemotronic
EVA TPN BAG, INT THR, 5000 mL	E3050OD	30	mfr. Haemotronic
EVA TPN Bag, 125 mL (LL Fill Port)	E1301-OLPF	50	Luer Lock port; mfr. Diffuplast
EVA TPN Bag, 250 mL (LL Fill Port)	E1302-OLPF	50	Luer Lock port; mfr. Diffuplast
EVA TPN Bag, 500 mL (LL Fill Port)	E1305-OLPF	50	Luer Lock port; mfr. Diffuplast
EVA TPN Bag, 1000 mL (LL Fill Port)	E1310-OLPF	40	Luer Lock port; mfr. Diffuplast
EVA TPN Bag, 2000 mL (LL Fill Port)	E1320-OLPF	35	Luer Lock port; mfr. Diffuplast
EVA TPN Bag, 3000 mL (LL Fill Port)	E1330-OLPF	35	Luer Lock port; mfr. Diffuplast
EVA TPN Bag, 4000 mL (LL Fill Port)	E1340-OLPF	30	Luer Lock port; mfr. Diffuplast
EVA TPN Bag, 5000 mL (LL Fill Port)	E1350-OLPF	25	Luer Lock port; mfr. Diffuplast
EVA TPN BAG MULTILAYER 125 mL	E1401OD	50	Lg. Bore port, mfr. Diffuplast
EVA TPN BAG MULTILAYER 250 mL	E1402OD	50	Lg. Bore port, mfr. Diffuplast
EVA TPN BAG MULTILAYER 500 mL	E1405OD	50	Lg. Bore port, mfr. Diffuplast
EVA TPN BAG MULTILAYER 1000 mL	E1410OD	40	Lg. Bore port, mfr. Diffuplast
EVA TPN BAG MULTILAYER 2000 mL	E1420OD	35	Lg. Bore port, mfr. Diffuplast
EVA TPN BAG MULTILAYER 3000 mL	E1430OD	35	Lg. Bore port, mfr. Diffuplast
EVA TPN BAG MULTILAYER 4000 mL	E1440OD	30	Lg. Bore port, mfr. Diffuplast
EVA TPN BAG MULTILAYER 5000 mL	E1450OD	25	Lg. Bore port, mfr. Diffuplast

Product	Product Code	Quantity / Case	Notes
TPN EVA UV BAG 125mL with female connector	BX0001BP	150	Lg. Bore port, mfr. Valmed
TPN EVA UV BAG 250mL with female connector	BX0002BP	150	Lg. Bore port, mfr. Valmed
TPN EVA UV BAG 500mL with female connector	BX0003BP	150	Lg. Bore port, mfr. Valmed
TPN EVA UV BAG 1000mL with female connector	BX0004BP	125	Lg. Bore port, mfr. Valmed
TPN EVA UV BAG 2000mL with female connector	BX0005BP	80	Lg. Bore port, mfr. Valmed
TPN EVA UV BAG 3000mL with female connector	BX0006BP	80	Lg. Bore port, mfr. Valmed
TPN EVA UV BAG 4000mL with female connector	BX0007BP	60	Lg. Bore port, mfr. Valmed
TPN EVA UV BAG 5000mL with female connector	BX0008BP	50	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 125mL with female connector	BX0009BP	150	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 250mL with female connector	BX0010BP	150	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 500mL with female connector	BX0011BP	150	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 1000mL with female connector	BX0012BP	125	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 2000mL with female connector	BX0013BP	60	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 3000mL with female connector	BX0014BP	60	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 4000mL with female connector	BX0015BP	60	Lg. Bore port, mfr. Valmed
TPN MULTILAYER BAG 5000mL with female connector	BX0016BP	50	Lg. Bore port, mfr. Valmed

ExactaMix bags are sterile, bio-compatible, non-pyrogenic and contain no natural rubber latex components. These bags have a large-bore, threaded fill-port connector or a Luer lock fill-port connector.

SELF-SERVICE KITS

Baxter is making several self-service kits available to customers. The following kits are currently available for the ExactaMix Pro Compounder:

Product	Product Code
CR2032 Battery Replacement Kit	BXU537844
Display Arm Bracket Kit	BXU537829
Display Cable Kit	BXU537863
Scanner Holder Kit	BXU537820

Each kit contains instructions for use. For additional information, please reach out to your local Baxter Technical Support team.

GETTING HELP

Always contact Baxter Technical Support if you encounter any issues.

Baxter Technical Support can be contacted by emailing COtechsupport@baxter.com or calling 1.800.678.2292 (if from the U.S. or Canada). Regional Technical Support contact information can also be found by visiting www.baxter.com/location-selector , selecting your location and using the contact link.

Before you call for technical support, you will need your compounder's software version and build number. To obtain this information follow the instructions below.

1. At the menu screen, tap **Help > About**.

   The *About* window appears. It provides information about the hardware and software.
2. At the *About* window, identify the **Operating Software Version** and **Build Number**.

About window

Alternatively,

IMPORTANT! These instructions require the user to have System Settings permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

1. At the menu screen, tap **Tools > System Settings**.
   The *System Settings* window appears. It provides information about the hardware and software along with other operating system settings.
2. Select the **Device Information** option in the left pane.
3. In the right pane, identify the **Software Version** and **Build Number**.

System Settings window

Tutorials are available with step-by-step directions available for setting up the compounder.

1. At the menu screen, tap **Help > Tutorials**.
2. At the tutorials window:
   - With the **Contents** button, tap a topic to display the associated help content.
   - With the **Index** button, enter and search for keywords.
   - With the **Search** button, search any topics

INSTALLING THE COMPOUNDER

Your Baxter service provider will install the compounder at your site.

If you must reinstall the compounder, relocate the compounder or replace a component, verification tests must be performed before you use the compounder again. Contact Baxter Technical Support for assistance. Refer to Getting Help on Page 20.

NOTE: If a compounder needs to be moved to a new location, please contact Baxter Technical Support at least 30 days prior to the date of relocation.

To start, open the packaging, remove all the items, and inspect them to make sure that they are not damaged.

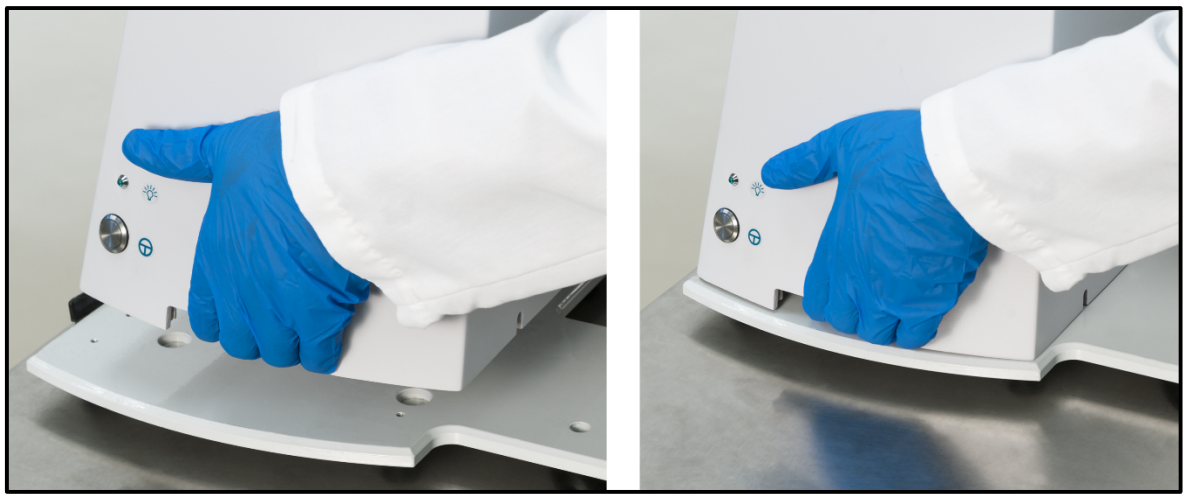
Tip! Save the packaging material for future use in case the modules ever need to be shipped for technical service or repair.

WARNING

Do not use sharp objects to open the packaging. Personal injury could result.

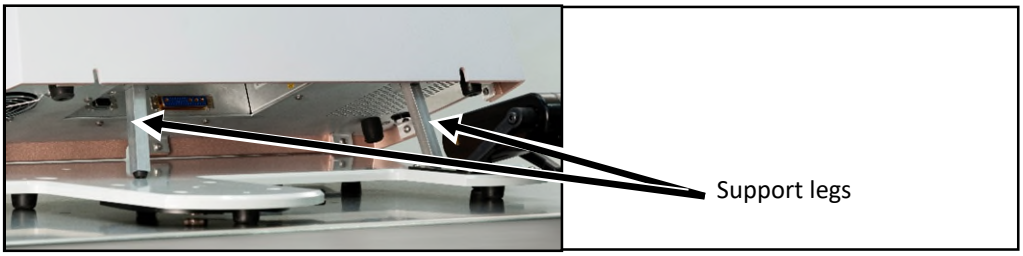
The compounder should be always placed on a level and stable surface to prevent the compounder or its individual modules from falling. Always hold the modules as shown below to avoid dropping them.

1. Route the power cord out through the routing hole in the back of the main module.
2. Place the main module onto the base plate.



Placing the main module

3. Place the load cell on the left of the base plate.
4. Place the display on the right of the base plate.
5. Tip the main module back and extend the support legs.



Extending the support legs

NOTE: If the main module is near a wall, there may not be enough space behind the main module to tip it back. You can move the compounder forward by lifting the front of the base plate slightly and sliding it toward you.

WARNING

Using the support legs will reduce the possibility of pinching your hands when you connect the cord and cables.

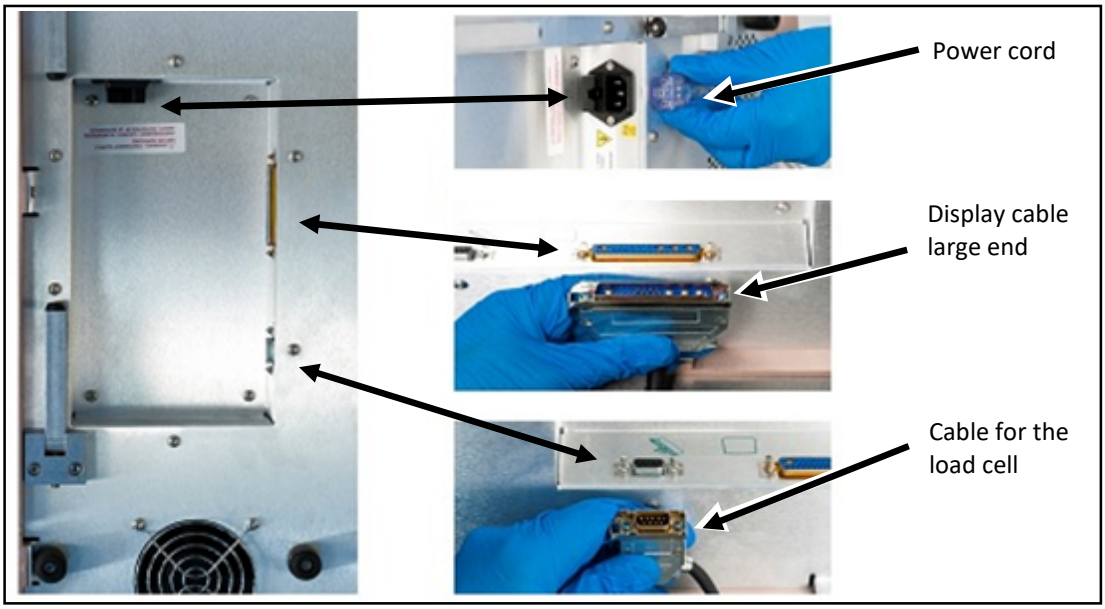
The power cord must be unplugged from the main AC power source whenever you connect or disconnect the display and load cell.

The power cord must be positioned so that the plug is easily accessible.

CAUTION

Ensure the system is fully powered down before disconnecting the display cable. Failure to unplug the power cord before disconnection of the display can result in the system becoming inoperable.

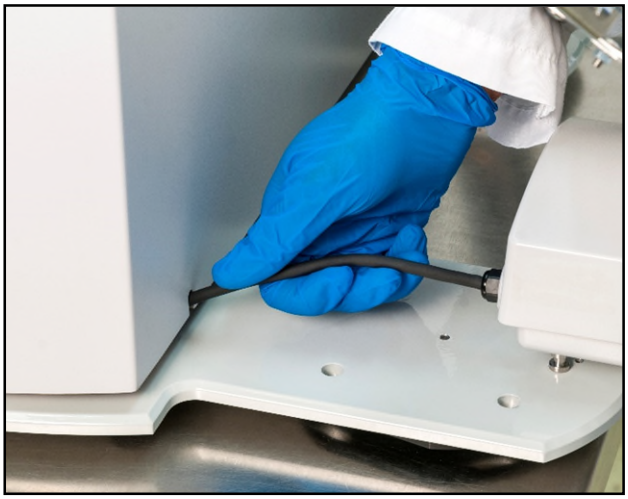
6. Under the main module, connect the following cord and cables. Reach under the main module with your palm facing up.
    a. Connect the power cord.
    b. Connect the larger end of the display cable. Squeeze the ends of the connector to unlock it, connect it, and then release to lock it into place.
    c. Connect the load cell cable. Squeeze the ends of the connector to unlock it, connect it, then release to lock it into place.



Connecting the cord and cables

NOTE: Connector locations may vary depending on the model.

7. Retract the support legs so that the main module rests fully on the base plate.
8. Route the cables through the two routing cut-outs, pushing any excess cable length through the holes. Ensure cables are not pinched under the main module.
   IMPORTANT! Ensure the cables are routed through their respective cut outs and not pinched under the main module.

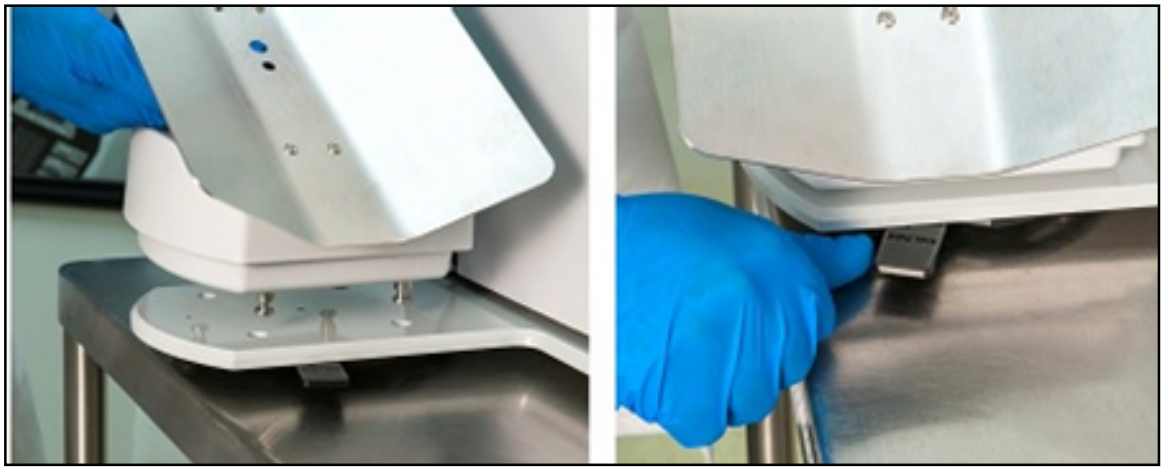


Routing a cable

9. Install the load cell.

a. Place the load cell onto the base plate.

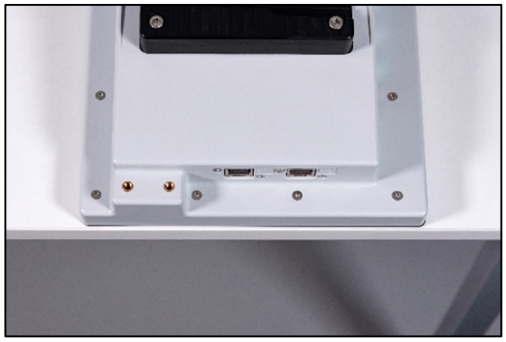
b. To lock the load cell, move the black lever back until it clicks into place.



Installing the load cell

10. Display preparation:

a. Place the display face down on a flat clean surface with the scanner side edge positioned flush to the edge of the workstation.



b. Position the scanner holder so that the two screw holes in the scanner holder align with the two threaded holes of the display.

c. Use the supplied hardware and a 2.5 mm hex driver to secure the scanner holder to the display. Baxter recommends tightening to 4 in-lbs. (0.45 N · m) of torque.

IMPORTANT! Do not over tighten.

11. Attach the smaller end of the display cable to the connection on the bottom of the display.

Display cable small end

12. Install the display onto the mounting arm.

The white locking pin snaps into the locked position.

Installing the display

NOTE: To remove the display, pull the locking pin out to the unlocked position, then rotate the pin 90 degrees to keep it in this position while lifting the display.

13. Place the barcode scanner on the scanner holder with the trigger facing away from you.

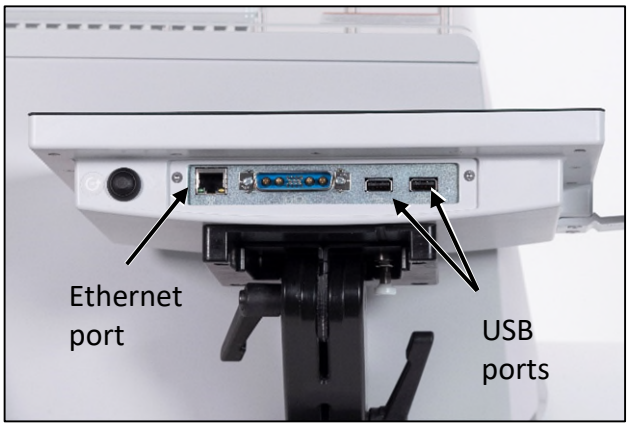
Placing the barcode scanner

14. Connect the USB cable from the barcode scanner to a USB port on the bottom of the display.

15. If desired:

- Connect the USB cable from the printer to a USB port on the display.
- Connect a cable to the Ethernet port on the display.

NOTE: To perform administrative work, you can also connect a keyboard and mouse to the USB ports on the display. Disconnect keyboard and mouse before starting normal compounding operation.



For Symbol definitions, refer to Symbols on Page i

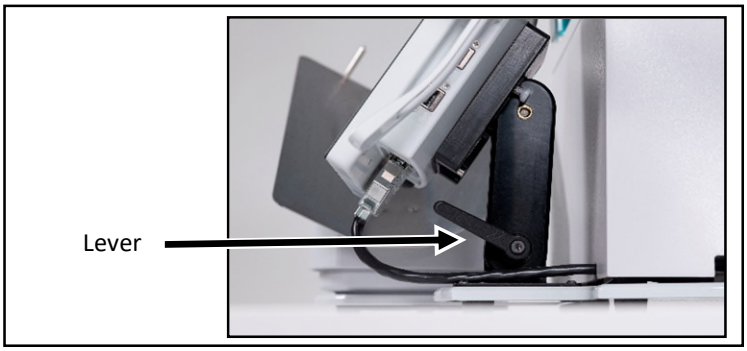
16. Move the arm of the display to the desired position by doing the following:

a. Unlock the lever on the right by rotating it backward.

NOTE: Pulling the lever slightly out to the right may make it easier to rotate.

b. Adjust the arm of the display forward or backward.

c. Lock the lever by rotating it forward.



Lever on the right

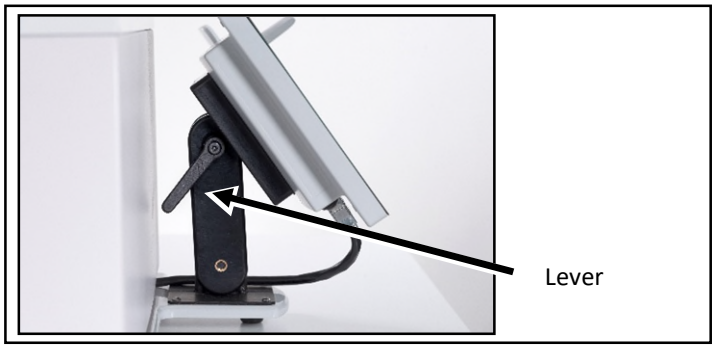
17. Move the display to the desired position by doing the following:

a. Unlock the lever on the left by rotating it backward.

NOTE: Pulling the lever slightly out to the left may make it easier to rotate.

b. Adjust the display up or down.

c. Lock the lever by rotating it forward.



Lever on the left

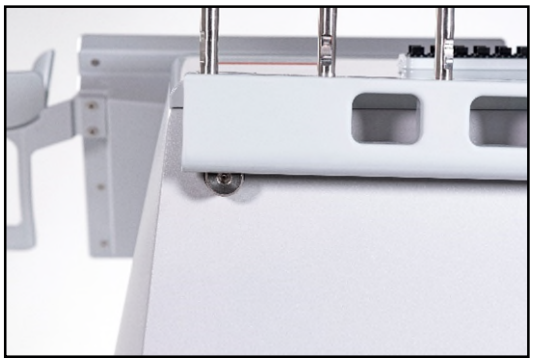
18. Check that the cables:

- Are not kinked or pinched
- Do not touch the base of the load cell

19. Plug the power cord into an uninterruptible power supply (UPS).

NOTE: Baxter recommends the **ExactaMix Pro** compounder be connected to an uninterruptible power supply (UPS) with battery backup. This will prevent power spikes and/or a hard shutdown of the device.

20. Install the vial rack onto the back of the main module. On each end, slide the slot on the vial rack over the bolt on the main module.

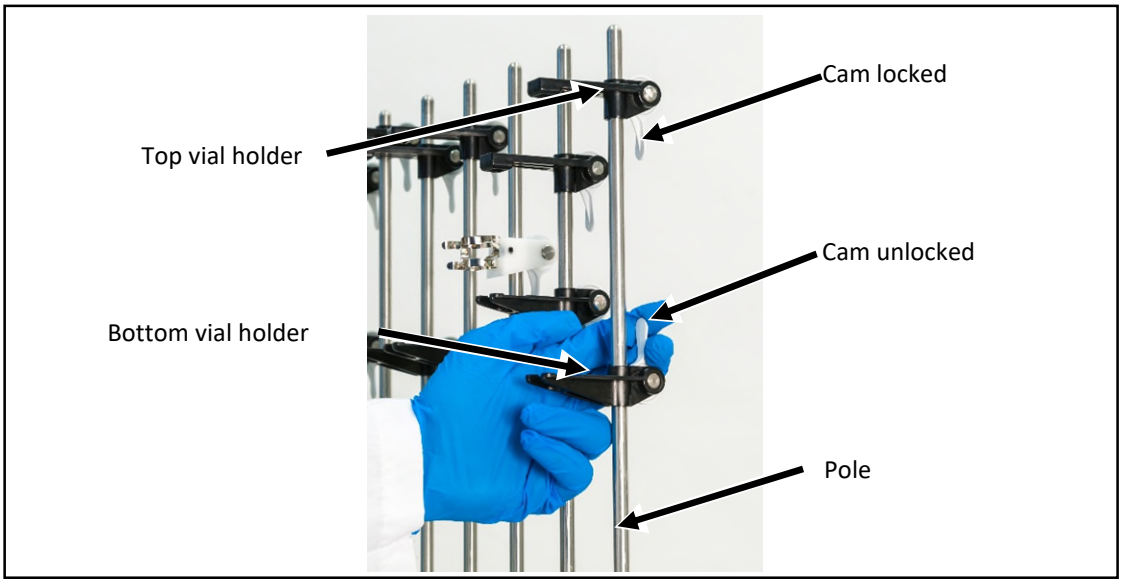


Installing the vial rack

21. Install the vial holders in the desired locations on the vial rack.

22. Adjust the position of each top and bottom vial holder.

a. Rotate the cam up to the unlocked position.
b. Push the holder to the desired location on the pole.
c. Rotate the cam down to the locked position.

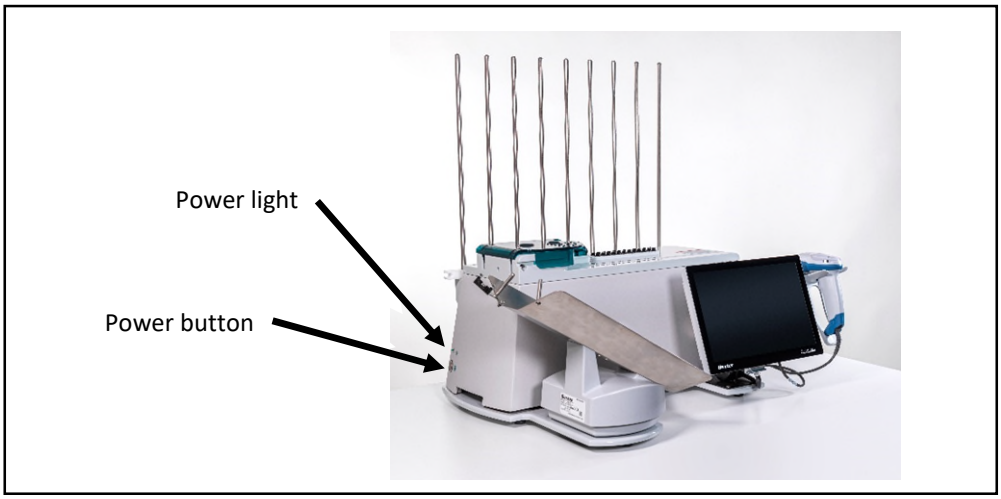


Adjusting the vial holders

STARTING UP, LOGGING IN AND OUT, AND SHUTTING DOWN

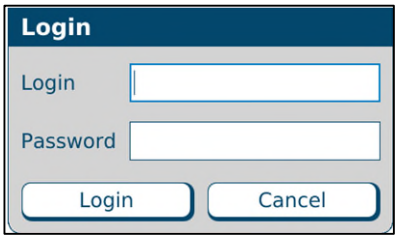
STARTING UP AND LOGGING IN

1. On the main module, press and hold the power button until the power light illuminates.



Power light and power button

2. If the *Login* window appears:
   a. Enter a **Login** name.
   b. Enter a **Password**. (**NOTE:** Passwords are case-sensitive)
   c. Tap **Log In**.



Login window

Tip! Baxter recommends setting up each user with a unique login name and password. If the compounder is connected to a network, Baxter recommends that the compounder be logged in to the network automatically. For details, contact Baxter Technical Support. Refer to Getting Help on Page 20.

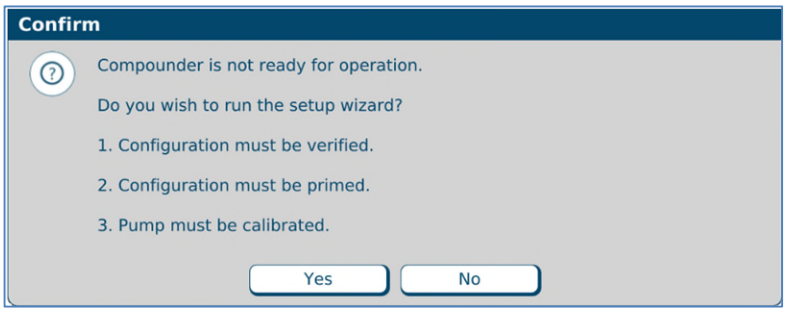
NOTE: The maximum number of login attempts allowed is 3. You may wait 5 minutes to try again or an administrator may reset your password

NOTE: To require each user to log in, refer to Setting Up the Security Options on Page 107. To set up password expiration, refer to Password Expiration on Page 107.

Next, the software may display a *Confirm* screen. Several styles of the *Confirm* screen may appear, but each includes this text: **Compounder is not ready for operation. Do you wish to run the setup wizard?** The screen also lists the conditions that prevent the compounder from being ready for operation. The screen appears if any of these conditions exist:

- The calibration of the load cell has expired.
- The calibration of the pump has expired.
- The tube set has expired.

  NOTE: To set up the options for tube set expiration, refer to Tube Set Expiration on Page 104.



Confirm screen

3. If the *Confirm* screen appears:
   - Tap **Yes** if you want to use the Setup Wizard now. For instructions on using the Setup Wizard, refer to Setting Up the Compounder on Page 33.
   - Tap **No** if you want to continue using the software in the current state.

     Tip! Baxter recommends always tapping **Yes**. If you tap **No**, you will be instructed to perform any required setup steps before compounding.

LOGGING OUT

When you have finished using the compounder, or another user needs to log in, you can log out of the software without shutting down the compounder.

At the menu screen, tap either:

- **File > Logout**
- **Tools > Users > Change User**

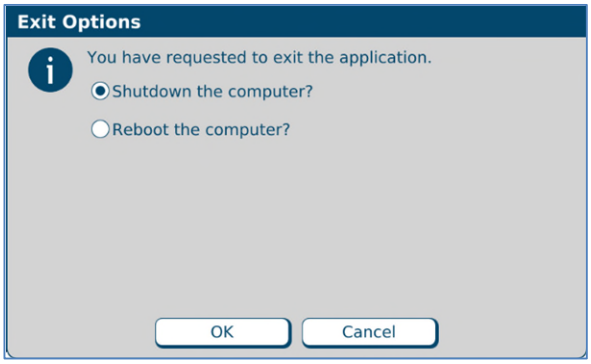
NOTE: The *Confirm* screen may appear if the compounder is not ready for operation. To set up the automatic logout option, refer to Auto-Logout on Page 107.

REBOOTING AND SHUTTING DOWN

Tip! Baxter recommends shutting down the compounder when you are finished using it. Baxter also recommends fully shutting down and starting up the compounder once a day, to allow the software to perform routine database maintenance at startup.

1. At the menu screen, tap **File > Exit**.

   The *Exit Options* window appears.



Exit Options window

2. Tap one of these options:
   - **Shutdown the computer?** to shut down the software and turn off the compounder
   - **Reboot the computer?** to shut down the software, turn off the compounder and restart the compounder
3. Tap **OK**.

NOTE: You cannot turn off any part of the compounder by pressing the power button on the main module. This button is used only to turn the power on.

CAUTION

To reboot a nonresponsive display, press and hold the Reset button on the bottom left of the display. To shut down the compounder (main module and display), press and hold the power off button on the bottom right of the main module. However, either of these actions can corrupt the database. Do not press the Power or Reset buttons at any time unless directed to do so by Baxter Technical Support.

SETTING UP THE COMPOUNDER

ACCESSING THE SETUP WIZARD

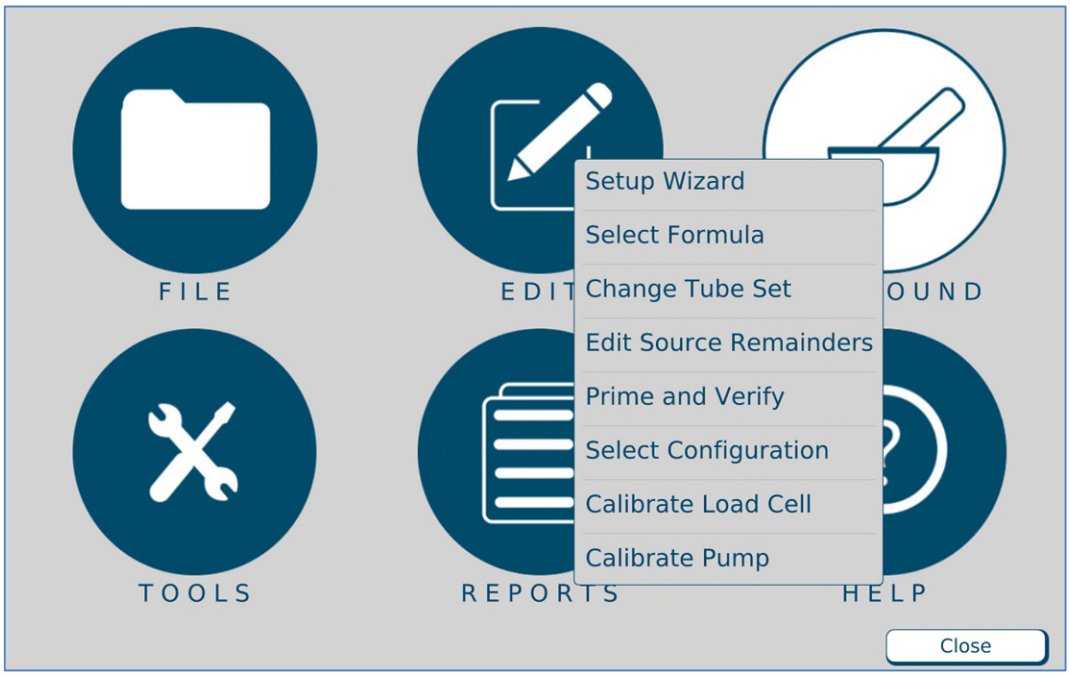
The Setup Wizard guides you through the setup process.

You can access the Setup Wizard in two ways:

- Tap **Yes** at the *Confirm* screen if it appears during startup.
- Tap **Compound > Setup Wizard** at the menu screen to access the Setup Wizard at any time.

NOTE: The **Compound** menu also includes options that allow you to perform individual steps of the setup process without completing the entire Setup Wizard.

Tip! Baxter recommends always using the Setup Wizard to guide you quickly through the necessary steps in the proper sequence.

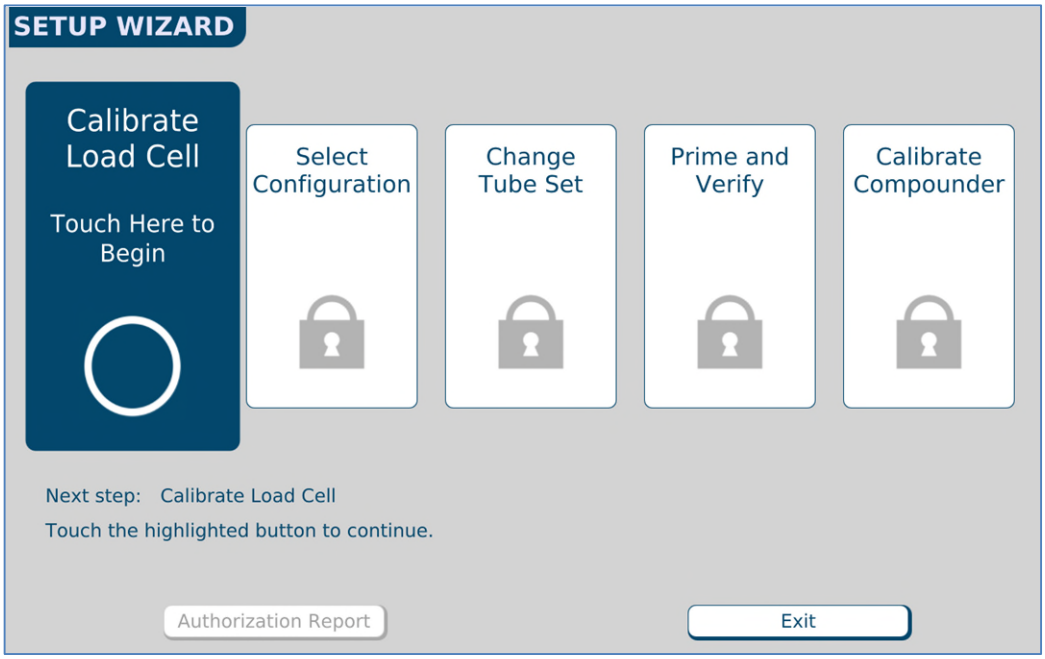


Menu screen, Compound menu

IMPORTANT! These functions require Compounder permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

The Setup Wizard guides you through these main steps:

1. **Calibrate Load Cell** guides you through calibrating the load cell.
2. **Select Configuration** allows you to select a configuration to use.
3. **Change Tube Set** guides you through installing a new tube set and new ingredients for the selected configuration.
4. **Prime and Verify** guides you (and an optional cosigner) through the process of priming the inlets and verifying the setup.
5. **Calibrate Compounder** calibrates the compounder's pump to ensure that it will deliver the intended volume of each ingredient.
6. **Authorization Report** allows you to view and print the Authorization Report, if desired.



Setup Wizard screen

CALIBRATING THE LOAD CELL

This procedure calibrates the load cell to ensure that it measures weight accurately.

The load cell must be calibrated:

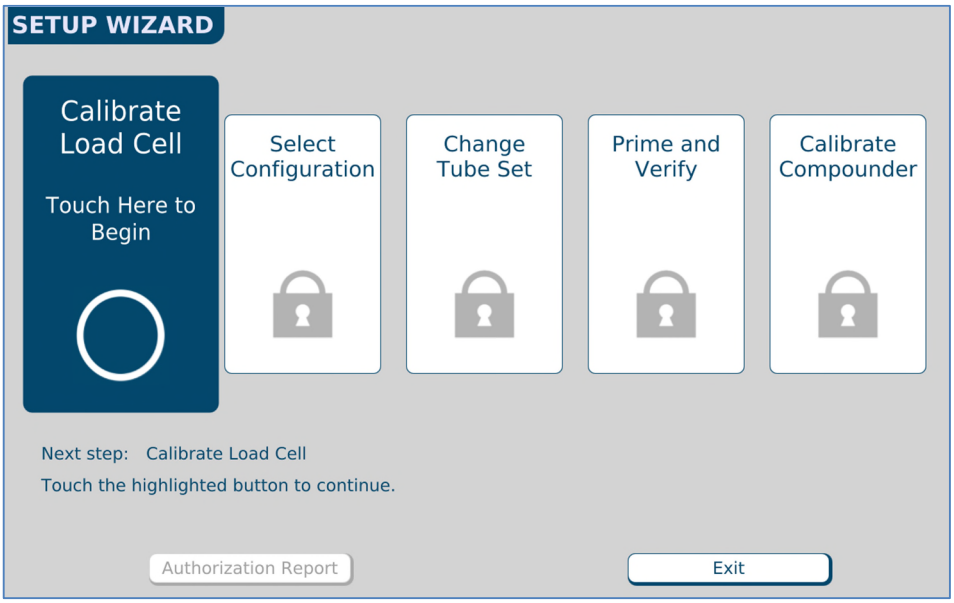
- Daily when the calibration expires
- Using a 2,000 g weight that Baxter provides

Tip! Baxter recommends:

- Using gloves to handle the weight, to minimize the accumulation of oils and dust
- Storing the weight in its storage case

To calibrate the load cell:

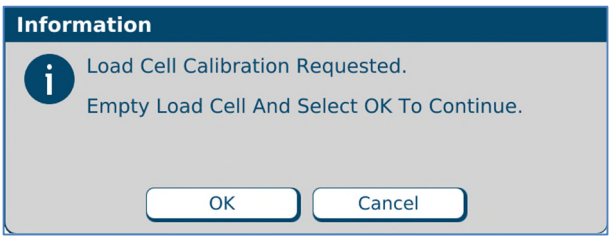
1. At the *Setup Wizard* screen, tap **Calibrate Load Cell**.



Setup Wizard screen, calibrating the load cell

NOTE: To calibrate the load cell without using the Setup Wizard, you can tap **Compound > Calibrate Load Cell** at the menu screen.

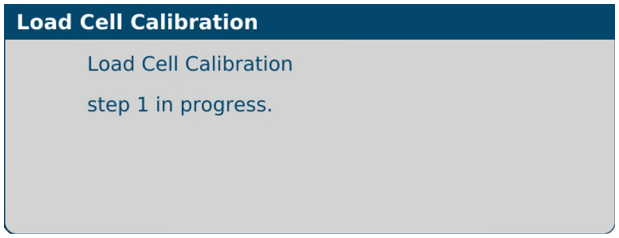
The Load Cell Calibration Requested message appears.



Message

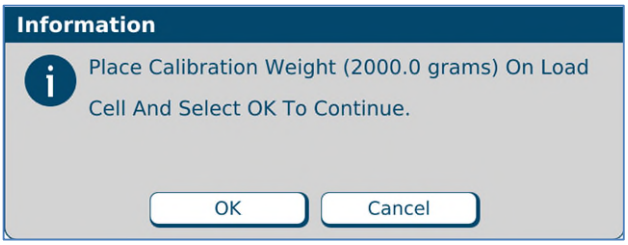
IMPORTANT! If any items touch the load cell during the calibration, the calibration will not be accurate.

2. Make sure that:
   - There is no weight on the load cell.
   - There is nothing touching any part of the load cell (for example, there are no cables touching the base).
3. At the *Load Cell Calibration Requested* message, tap **OK**.
   This message appears and then disappears:



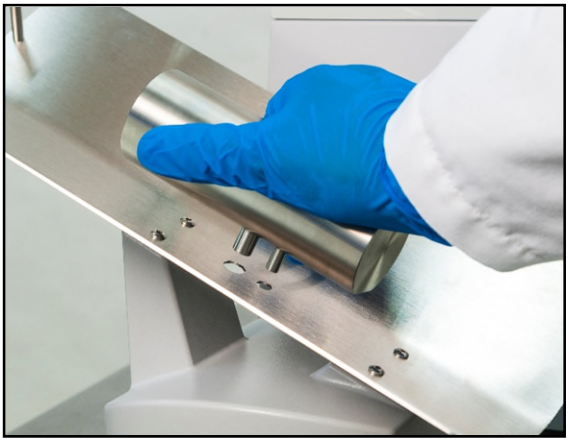
Message

The *Place Calibration Weight* message appears.



Message

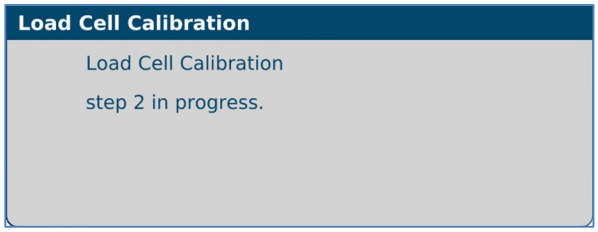
4. Place the 2,000 g weight on the load cell, aligning it with the holes in the load cell.



Aligning the calibration weight

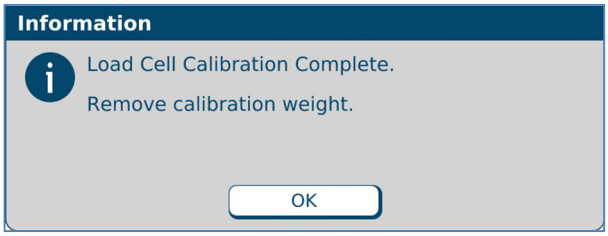
5. Wait five seconds to allow the weight to stabilize.
6. At the *Place Calibration Weight* message, tap **OK**.

   This message appears and then disappears:



Message

When calibration is finished, a *Load cell calibration complete* message appears.



Message

7. If the *Load cell calibration complete* message appears, tap **OK**.
8. Remove the calibration weight.

SELECTING THE CONFIGURATION

The configuration identifies which ingredients are attached and at which ports on the compounder.

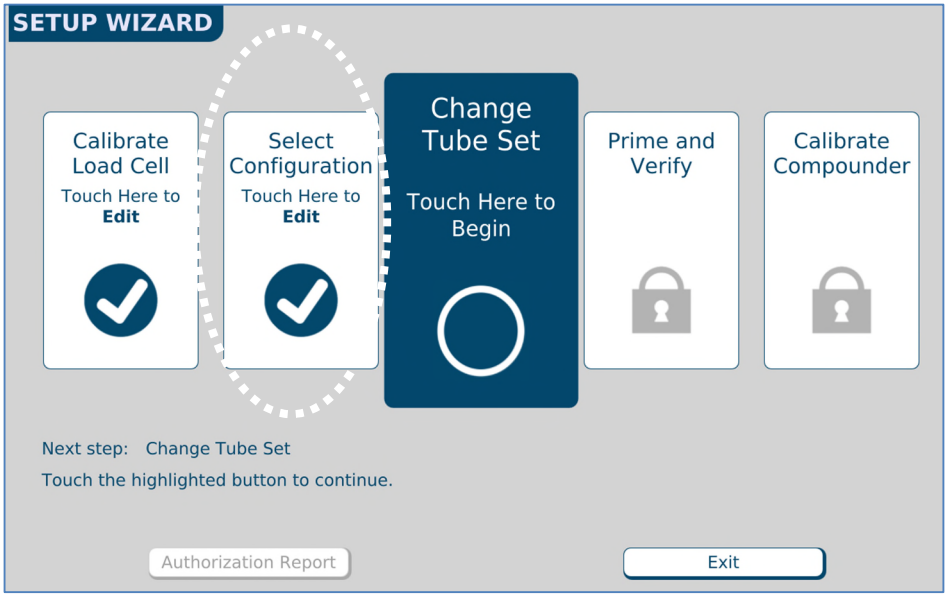
This procedure is required only if both of the following conditions exist:

- More than one configuration is available.
- You want to use a configuration that is different from the last one that was used.

The software automatically selects the last configuration that was used, and a check mark appears in the **Select Configuration** portion of the *Setup Wizard*.

If you want to change the configuration:

1. At the *Setup Wizard* screen, tap **Select Configuration**.

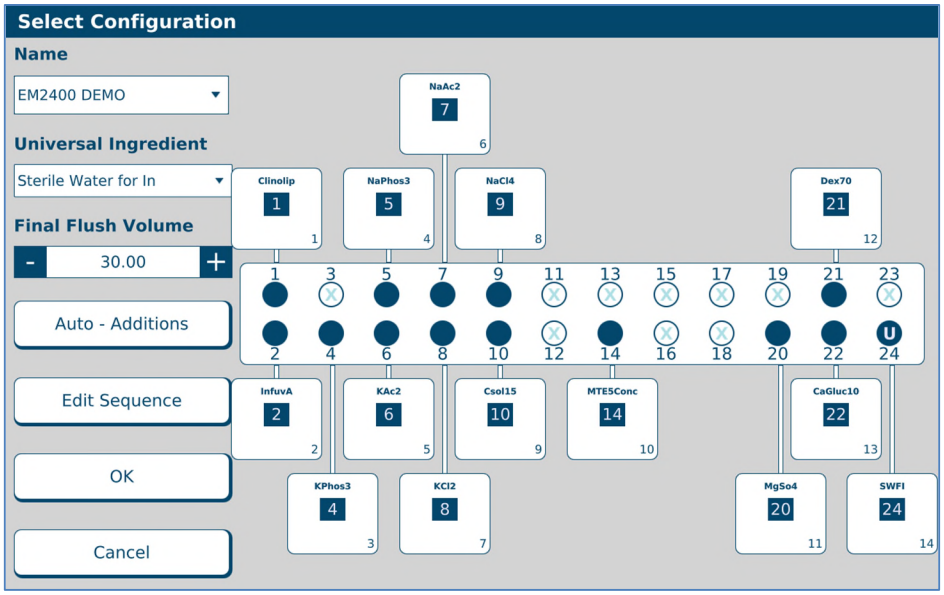


Setup Wizard screen, selecting the configuration

NOTE: To select the configuration without using the Setup Wizard, you can tap **Compound > Select Configuration** at the menu screen.

The *Select Configuration* screen displays the last configuration that was used.

2. In the **Name** list, select the desired configuration.
3. Tap **OK**.



Select Configuration screen

NOTE: When you select a different configuration, you most likely will need to change the tube set, then prime and verify it.

CHANGING THE TUBE SET

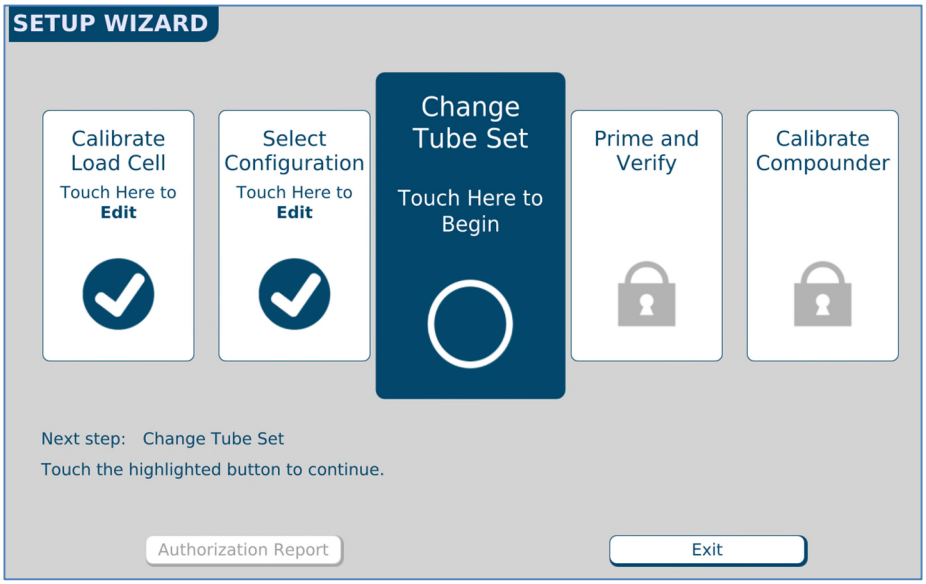
The tube set must be changed in the following scenarios:

- When you select a different configuration
- During the daily setup, if the tube set is expired

NOTE: To set up the options for tube set expiration, refer to Tube Set Expiration on Page 104.

Checking the Tube Set Statistics

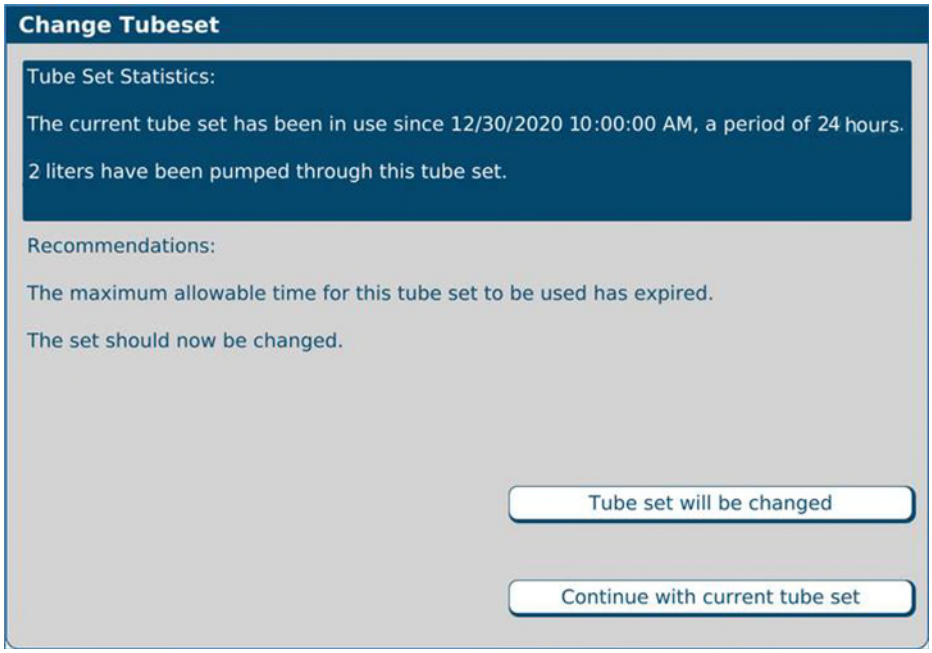
1. At the *Setup Wizard* screen, tap **Change Tube Set**.



Setup Wizard screen, changing the tube set

NOTE: To change the tube set without using the Setup Wizard, tap **Compound > Change Tube Set** at the menu screen.

A screen with tube set statistics and recommendations appears. The statistics show how long the current tube set has been installed and how much fluid has been pumped during that time. Based on the usage, the software recommends whether the tube set should be changed.



Tube set statistics and recommendations

2. Tap one of these options:

- Tap **Tube Set will be changed**, then continue with Changing the Tube Set on Page 92.

  NOTE: Selecting **Tube Set will be changed** resets the expiration counter for the tube set and resets the ingredient remainders (values in the software that represent the actual volume of fluid remaining in the source containers).

WARNING

To maintain delivery accuracy, the tube set must be replaced after it has delivered 150 L of fluid or been installed for 24 hours, whichever comes first.

Check that the materials of the inlets, valves and bags are compatible with all ingredients used. Contact the *ingredient manufacturer* to confirm compatibility.

- Tap **Continue with current tube set**.

  NOTE: Selecting **Continue with current tube set** does not reset the expiration counter or the ingredient remainders.

For removing the expired tube set and ingredients, refer to Removing the Expired Tube Set and Expired Ingredients on Page 91.

Installing the New Valve Set

CAUTION
If the valve set is not installed properly, the compounder may not pump accurately.

1. Check that the valve actuators are not broken or damaged.

Valve actuators

Normal

Damaged

Broken

WARNING
Do not use the compounder if a valve actuator is broken or damaged. Patient harm can result. For assistance, contact Baxter Technical Support. Refer to Getting Help on Page 20.

2. Open the pump door.
3. Remove the valve set from the packaging.

   NOTE: Always use aseptic technique when installing the valve set.

   IMPORTANT! Check the expiration date on the valve set before installing it. Do not use a valve set that is past its expiration date.
4. Place the valve set onto the valve actuators.
5. Push the end tabs down and out using your thumbs until you hear a click on each end.

Installing the valve set

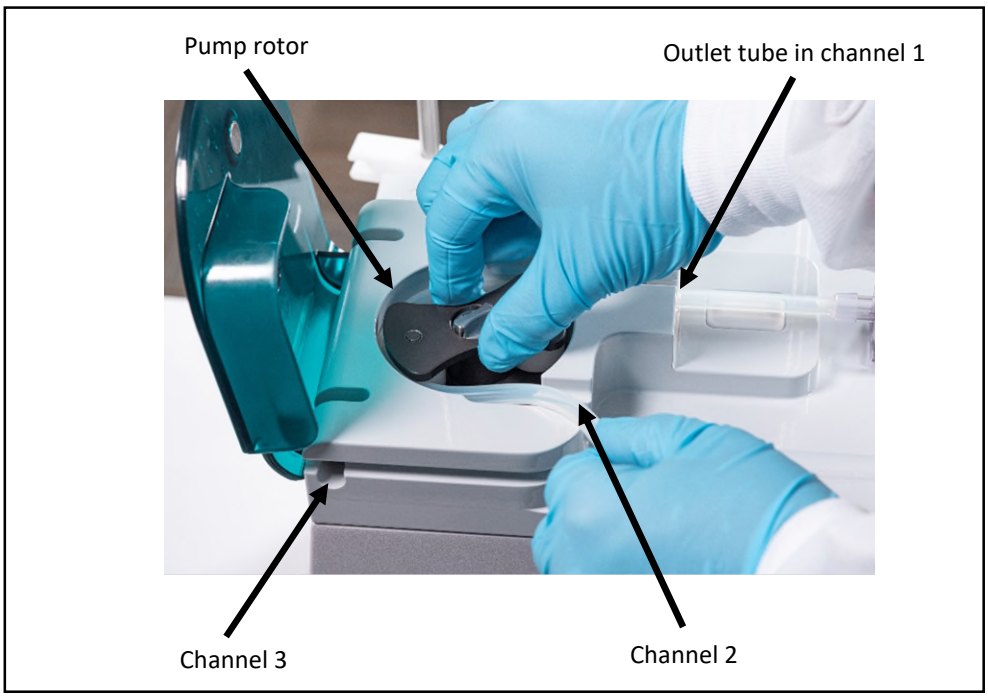
   NOTE: The appearance of the valve set may differ from the example shown above.
6. Make sure that the valve set is installed securely by pulling up on both ends gently.

CAUTION
Once the valve set has been installed, do not attempt to remove it during operation.

WARNING

To avoid pinching your fingers, grasp the pump rotor from the top and rotate it counterclockwise, keeping your fingers away from other surfaces while moving the rotor.

7. Route the outlet tube into channel 1, around the pump rotor and into channels 2 and 3 as shown. Move the pump rotor counterclockwise only. Do not pull or stretch the outlet tube.

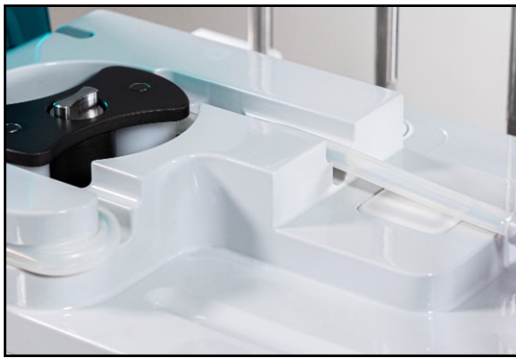


Routing the outlet tube

a. Make sure that the tube is in proper position at the bottom of channels 1.

Tip! Press down firmly on the silicone tubing to ensure contact with the bottom of the channel. This will ensure the tubing is properly seated in the bubble detector and over the occlusion detector.

Proper position



Improper position

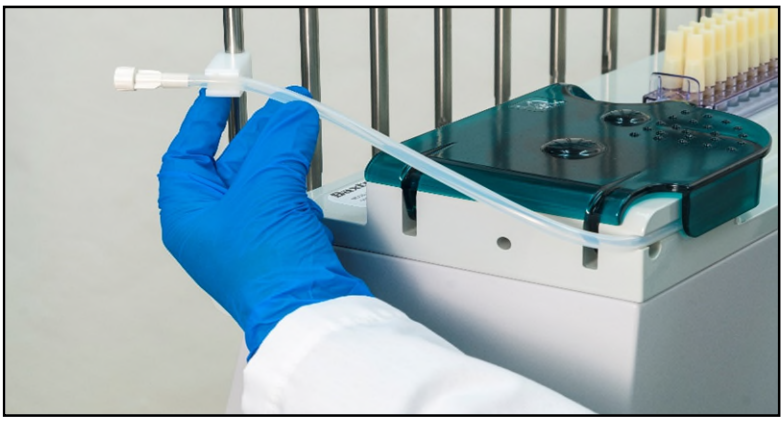
b. Make sure that the tube is in proper position against the wall around the pump rotor.

Proper position

Improper position

8. Close the pump door.
9. Connect the end of the outlet tube to the tube holder on the vial rack.

Tip! Optionally, you can attach the calibration bag to the outlet tube to avoid interference while connecting source containers.



Connecting the outlet tube

Preparing the New Ingredients

WARNING
The compounder is not for use with non-sterile containers.

WARNING
Review each drug product's safety profile before use.

Source containers that can be used with the compounder are:

- Large-volume, vented or collapsible containers or bags
- Large-volume, non-vented containers or bags
- Small-volume vials
- 50 or 60mL Luer syringes depending on brand

Tip! Baxter recommends using only sterile **BD** 50 mL Luer syringes. If you plan to use a different type, contact Baxter Technical Support. Refer to Getting Help on Page 20.

1. Gather all the new ingredients.

   Tip! Baxter recommends using a configuration's previous Authorization Report to identify the number of inlets and ingredients needed for a specific configuration. For more information, refer to Authorization Report on Page 172.

2. Check that each source container has a barcode label attached.

   Tip! Baxter strongly recommends using the manufacturer's barcode whenever possible.

   NOTE: For containers that are filled or diluted in the pharmacy, the Product Barcodes Report can make labels available for printing. For more information, refer to Product Barcodes Report on Page 183.

   IMPORTANT! Any container labeled with a barcode printed from **ExactaMix Pro** software should be verified and initialed by a pharmacist prior to connecting it to the compounder.

Attaching the New Ingredients and Inlets

Always use aseptic technique when attaching the ingredients and inlets.

Follow all the steps of this process for one ingredient and inlet pair before continuing with the next pair. This practice helps to ensure that you attach the ingredients and inlets correctly.

Tip! To keep track of the steps, Baxter recommends working from one end to the other in the sequence of the port numbers (example: 1, 2, 3 and so on). You might find it helpful to remember the main steps of this process (covered in more detail on the upcoming pages) by remembering the term **iTASL**, which signifies:

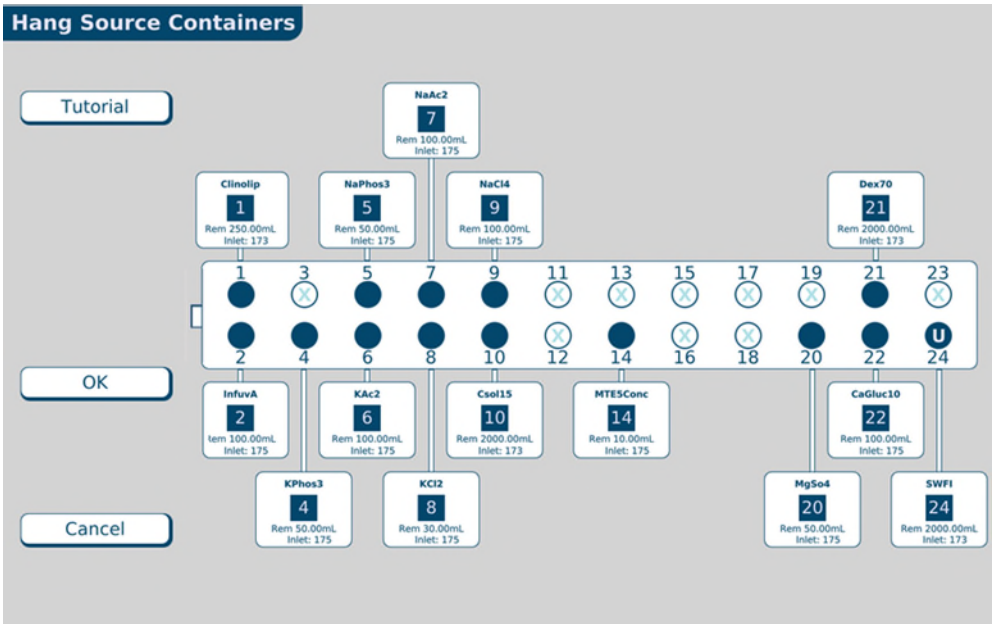
1. ***identify*** the port you are going to be working with by turning the cap.
2. ***Touch*** (tap) the ingredient button on the screen.
3. ***Attach*** the inlet to the port on the valve set.
4. ***Spike*** and hang the source container.
5. ***Label*** the inlet with the numbered barcode label.

To attach an ingredient:

1. ***identify*** the port you are going to be working with by turning or slightly raising the cap.

Turning Cap

2. ***Touch*** (tap) its ingredient button on the screen.



Hang Source Containers screen, no ingredient attached

The ingredient detail window appears.

IMPORTANT! Always view the ingredient detail window. It includes details not visible on the ingredient button. For example, it includes the full product description, which you must check.

Ingredient detail window

3. At the ingredient detail window, review the information.

a. Check that the **Port** number is correct.

b. Check that the **Product** description matches the source container to be used.

NOTE: If desired, you can tap the arrow to the right of this field to see a list of similar products in the same ingredient group. If you select another product in this list, the **Inlet** type and **Part #** may change accordingly.

c. Check that the **Inlet** type and **Part #** are correct.

NOTE: The **Part #** shows the last three digits of the complete part number. For a list of complete part numbers, refer to Inlets on Page 17. The complete part number also appears on the packaging materials for the inlet.

d. Check that the **Remainder (mL)** matches the current volume of the source container.

NOTE: When you attach a full, unopened container, the **Remainder (mL)** should equal the volume indicated on the container. When you attach a partially full container, change the **Remainder (mL)** to the actual volume in the container. *Remainders on syringes should always be verified. The compounder will use this information to help track the volume used, to alert you when the container needs to be changed.*

e. If required, enter or check the **Lot Number** and the **Expiration**.

NOTE: To set up these tracking options, refer to Track Product Expiration Date and Lot Number on Page 102.

WARNING

It is important to use the correct inlet type for the container. Using the incorrect inlet type can lead to occlusions and incorrect ingredient delivery, resulting in patient harm.

4. ***Attach*** the inlet to the port.

a. Locate the inlet type specified in the ingredient detail window.

b. Remove the inlet from its packaging materials and gently uncurl it. Do not pull or stretch the inlet.

WARNING

A kink in the tube, a plugged vent on a vial or bottle inlet or a plugged inlet spike can cause the compounder to deliver incorrect ingredient volumes, resulting in patient harm. After attaching the inlets, visually check that the tubes are not kinked or plugged.

c. Check that the inlet is not kinked or plugged.

d. On the valve set, locate the port number specified at the ingredient detail window. This port should match the identified port in step 1.

Tip! To locate an odd-numbered port, Baxter recommends locating the next, even-numbered port in the front row. For example, to attach an inlet to port 3, look for port 4 in the front row and then attach the inlet to the port directly behind it (port 3). Avoid leaning over the compounder.

e. Grasp the port cap with one hand, remove the port cap and immediately attach the inlet with your other hand.

5. ***Spike*** and hang the container.

CAUTION

The pictures and instructions on the following pages are for reference only. When spiking the container, use proper technique as identified by your facility's protocol.

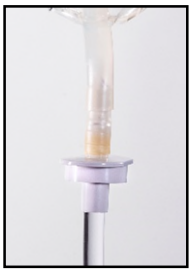
- To spike and hang a bag:
  NOTE: To prevent dropping the bag, you can hang it on the hood hanger.

  a. Turn the bag with its spike port facing down.
  NOTE: This step helps to reduce the possibility of air bubbles entering the inlet tube.

Turning

WARNING

Failure to insert the spike completely into the bag port may restrict flow and cause the delivery of incorrect ingredient volumes, resulting in patient harm.



Inserting

  b. Insert the spike fully into the bag, all the way to the flange.
  c. Rotate the spike 180° to prevent occlusions.
  d. Hang the bag on the hood hanger, if the bag is not already there.

- To spike and hang a bottle:
  NOTE: To prevent dropping the bottle, you can hang it on the hood hanger.

a. Turn the bottle with its septum facing down.
NOTE: This step helps to reduce the possibility of air bubbles entering the inlet tube.

Turning

b. Locate the shoulder of the spike.

Shoulder

c. Insert the spike into the septum of the bottle up to the shoulder of the spike.
NOTE: Inserting the spike up to the shoulder helps ensure that the maximum amount of fluid and the minimum amount of air is withdrawn from the bottle.

Inserting

d. Hang the bottle on the hood hanger, if the bottle is not already there.

Hanging

- To spike and hang a vial:

a. Turn the vial with its septum facing down.

NOTE: This step helps to reduce the possibility of air bubbles entering the inlet tube.

Turning

b. Insert the spike fully into the vial.

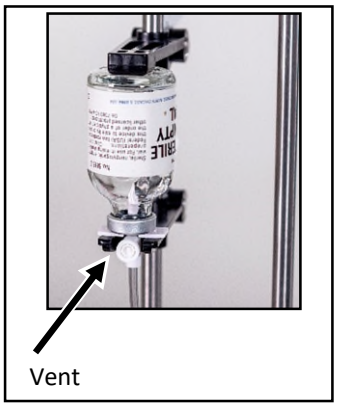
IMPORTANT! *Baxter recommends grasping the inlet alongside the vent as shown to ensure the vent does not get obstructed.*

Inserting

c. Push the bottom of the vial (now facing up) against the top holder. Make sure that the vent faces you, is unobscured and is not dislodged.
NOTE: If the vent faces away from you (into the bottom vial holder), the air flow may be obstructed, causing an occlusion or limited flow. Also, the vial will not be seated securely.

d. Slide the spiked end of the vial into the bottom vial holder.

NOTE: In the event the inlet vent cap comes off of the inlet, discard the inlet and replace with a new one.



Hanging

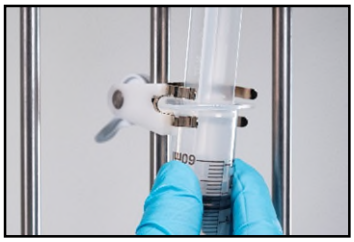
- To spike and hang a syringe:

  a. Turn the syringe with its Luer end facing down.
  NOTE: This step helps to reduce the possibility of air bubbles entering the inlet tube.
  NOTE: Only syringes that have been verified by a pharmacist should be hung on the compounder.

Rotating

  b. Rotate the inlet onto the syringe.

  c. Hang the syringe on the vial rack by snapping the syringe flanges into the syringe holder.
  NOTE: The flanges on the syringe should go into the slot between the spring clips on the syringe holder.



Hanging

6. ***Label*** the inlet with the appropriate port numbered barcode label that was packaged with the valve set. Attach the label close to the source container. The number on the label must match the number of the port to which the inlet is attached.

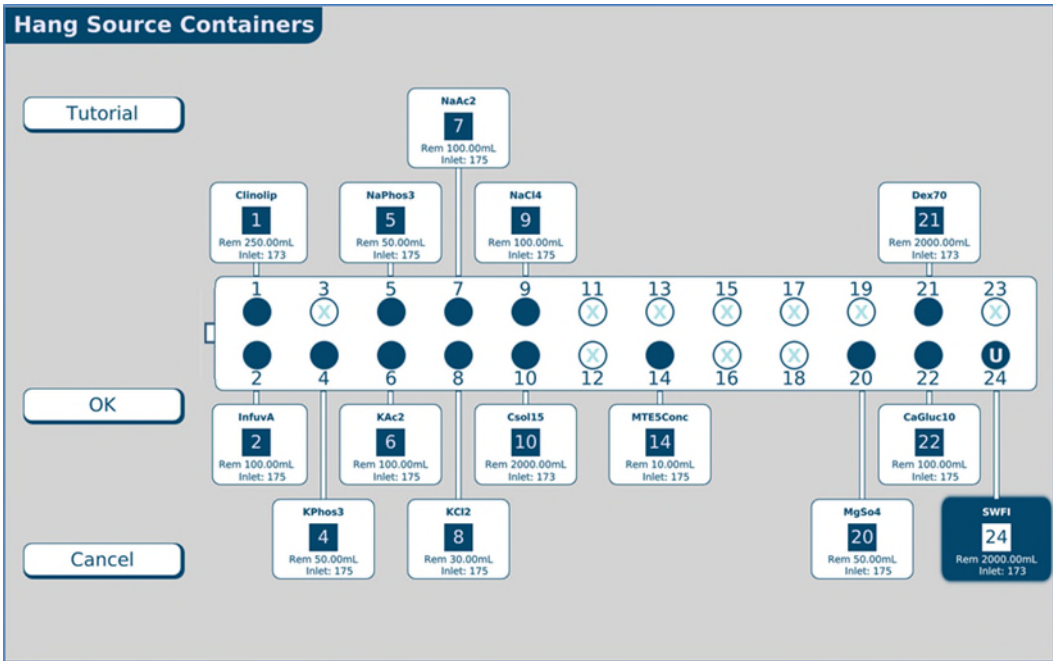
   ***Tip*!** Baxter recommends placing the barcode label on the inlet tube about an inch (2.5 cm) below the spike, so the user can see observe the fluid flowing.

7. Check that the correct inlet is:
   a. Attached to the correct ingredient and port
   b. Labeled with the correct barcode label

   Tip! Baxter recommends rotating the source container so that the barcode label faces you, for easy scanning during barcode verification.

8. At the ingredient detail window, tap **OK**.

At the *Hang Source Containers* screen, the color of the ingredient button becomes blue to indicate that the ingredient is attached and waiting to be primed.

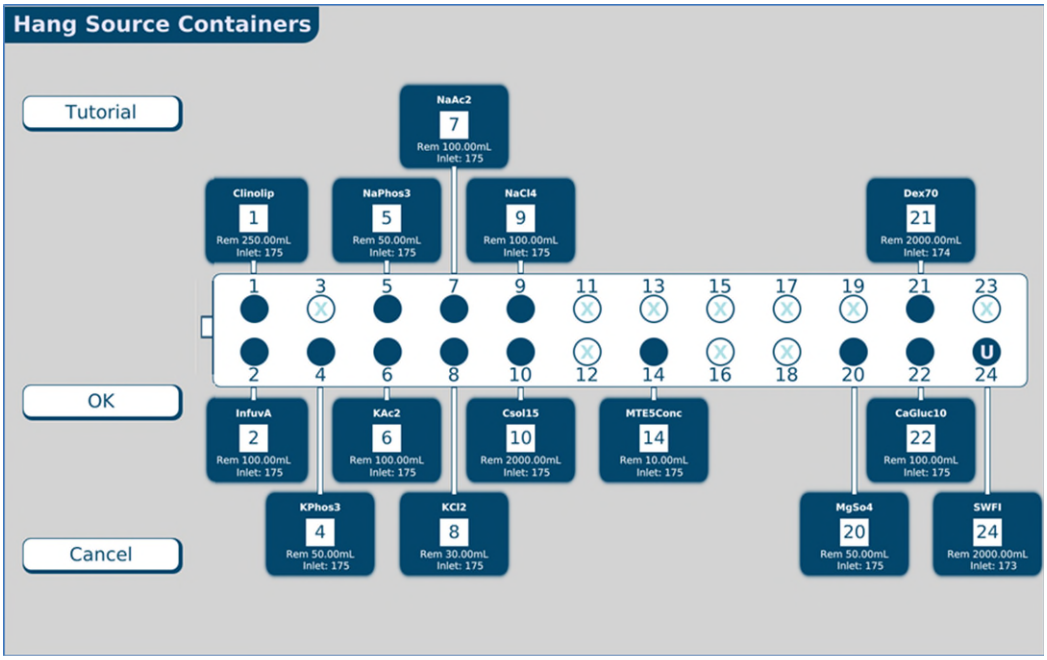


Hang Source Containers screen, one ingredient attached

9. Repeat the previous steps for all the ingredients you want to attach.

When all the ingredient buttons are blue, you are finished changing the tube set.

10. Tap **OK**.



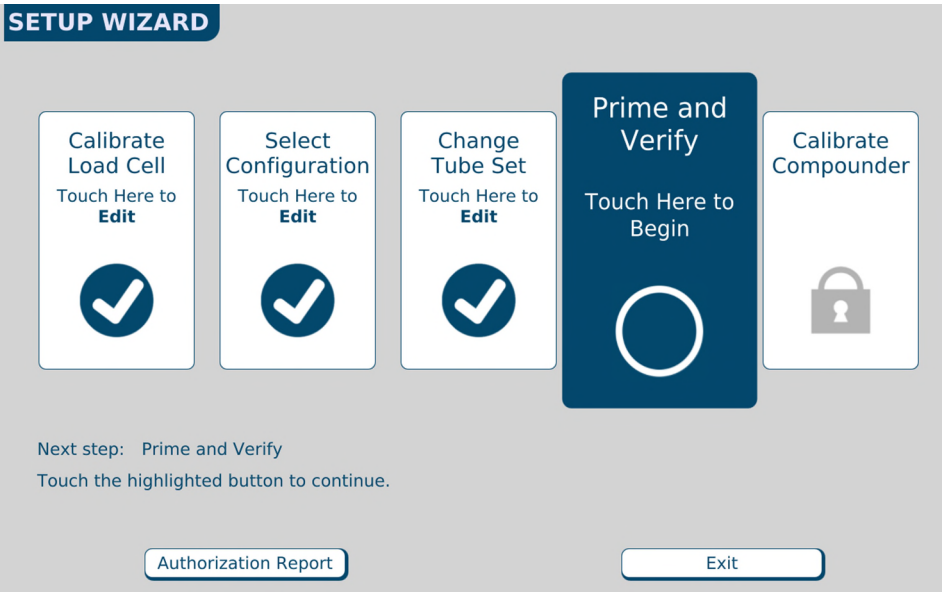
Hang Source Containers screen, all ingredients attached

If you started this procedure from the *Setup Wizard* screen, a check mark now appears in **Change Tube Set** portion of the *Setup Wizard* screen.

PRIMING AND VERIFYING

After the ingredients and inlets are attached, they must be primed and verified. This process includes scanning the barcodes on each container and inlet, priming the inlets and verifying the setup.

1. At the *Setup Wizard* screen, tap **Prime and Verify**.



Setup Wizard screen, priming and verifying

NOTE: To prime and verify without using the Setup Wizard, you can tap **Compound > Prime and Verify** at the menu screen.

WARNING
It is important to use a barcode scanner for scanning labels during verification of the setup.

2. If your facility:
   - Uses barcode verification, continue with Verifying the Ingredients and Inlet Barcodes on Page 54.
   - Does not use barcode verification, skip to Priming the Inlets and Verifying the Setup on Page 58.

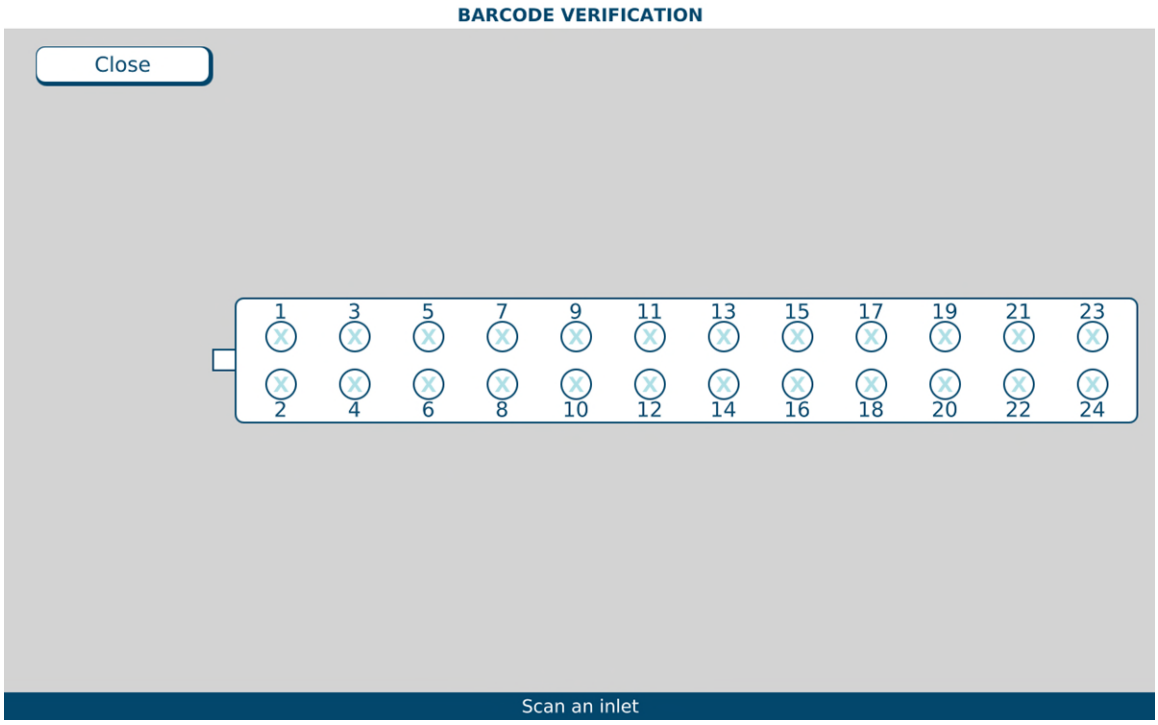
Verifying the Ingredients and Inlet Barcodes

WARNING
For the barcode verification to be effective, it is critical that the configuration be set up properly. For instructions, refer to Attaching the New Ingredients and Inlets on Page 45.

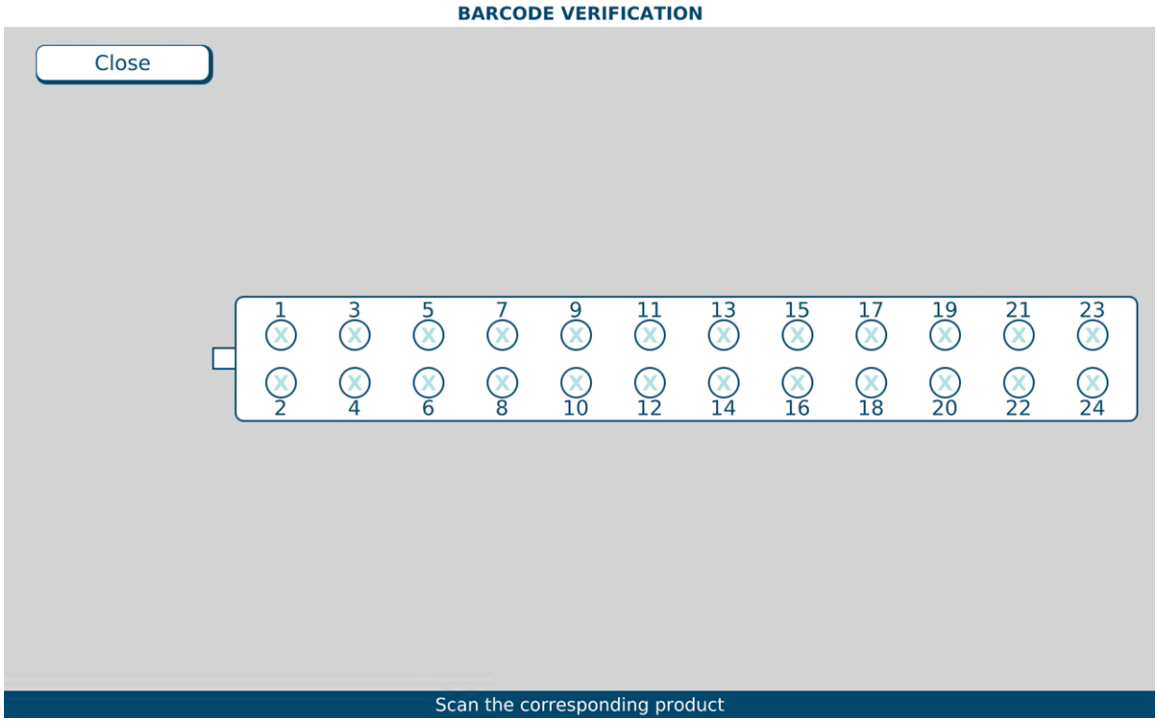
IMPORTANT! This procedure requires barcode scanning to be enabled. To enable barcode scanning (and, if desired, to require it for verification), refer to Barcode scanner on Page 108

Tip! Baxter recommends enabling barcode scanning at all times.

On the *BARCODE VERIFICATION* screen, the ports appear empty until the barcodes on the attached inlets and source containers are scanned.



BARCODE VERIFICATION screen, no barcode verified



BARCODE VERIFICATION screen, Inlet scanned, asking to scan the corresponding product

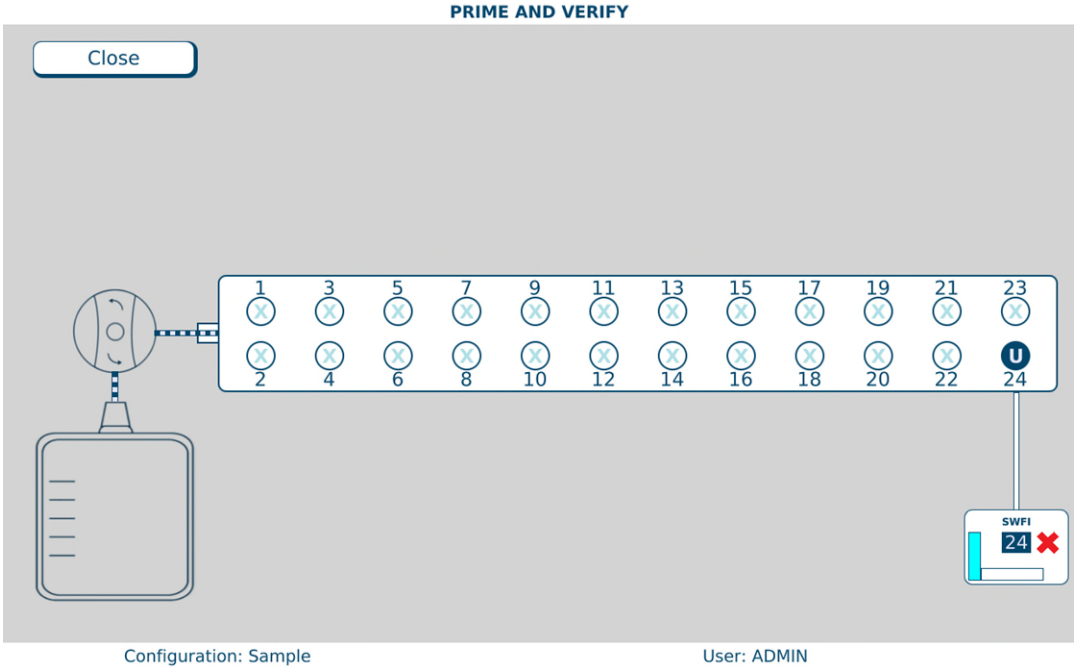
WARNING

Scan only the barcodes attached to the inlet and the corresponding source container. *Do not scan unattached barcodes or old (used) containers.* Doing so may result in incorrect ingredient delivery, resulting in patient harm.

Tip! Baxter strongly recommends scanning from left to right (or from right to left) to prevent skipping any ingredients or ports.

1. Scan the barcode label on an inlet.
2. Scan the barcode label on the corresponding source container.

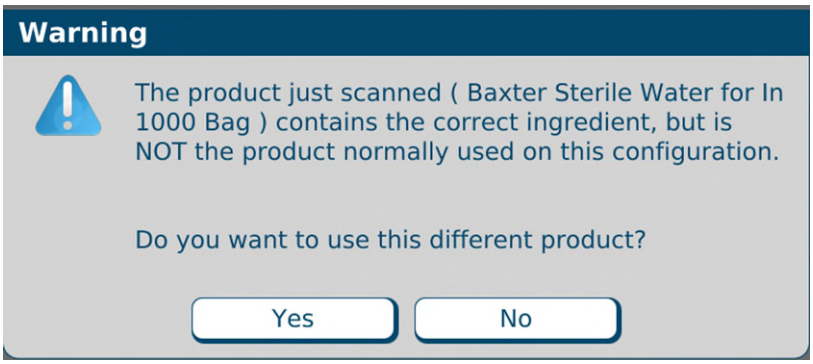
   If you scanned the correct source container, the corresponding ingredient button appears on the screen.



BARCODE VERIFICATION screen, one pair of barcodes verified

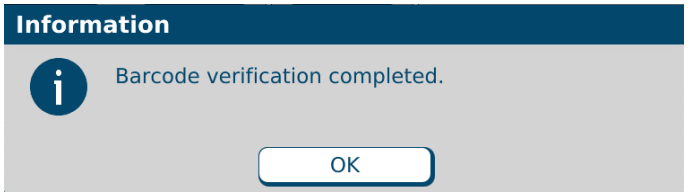
If you scanned an incorrect source container, the compounder beeps and displays **Incorrect scan, try again** at the bottom of the screen. Scan the correct source container.

If the scanned product is not the specific product identified in the configuration but is the same ingredient, a *Warning* message appears. Tap **Yes** if you want to use the scanned product.



Message

3. Repeat the previous steps until an ingredient button appears for each attached ingredient.
4. After all inlets and ingredients are scanned successfully, the *Barcode verification completed* message will appear, tap **OK**.



Message

Priming the Inlets and Verifying the Setup

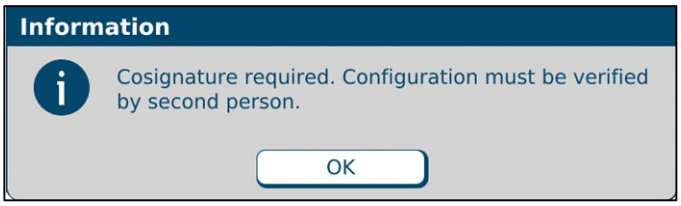
Usually, a cosigner must log in and verify the setup. Refer to your facility's protocol.

WARNING

It is important to always have a cosigner independently verify the setup, to help ensure that the first user attached each ingredient's inlet to the correct port. Incorrect setup could result in patient harm.

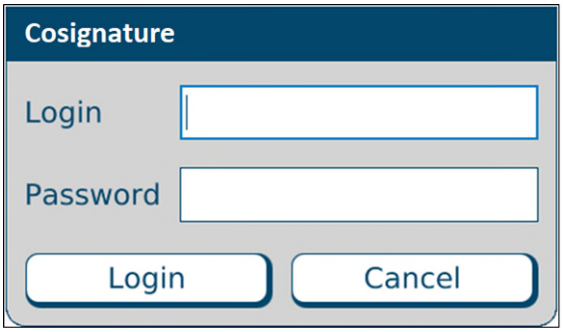
IMPORTANT! The cosignature option requires Verification permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125. To require that a cosigner verify the setup, refer to Cosignature on Page 108.

1. Attach a calibration bag, if not already attached. Refer to Attaching the Calibration Bag on Page 68.
2. If the *Cosignature required* message appears, the cosigner should:
   a. Tap **OK**.



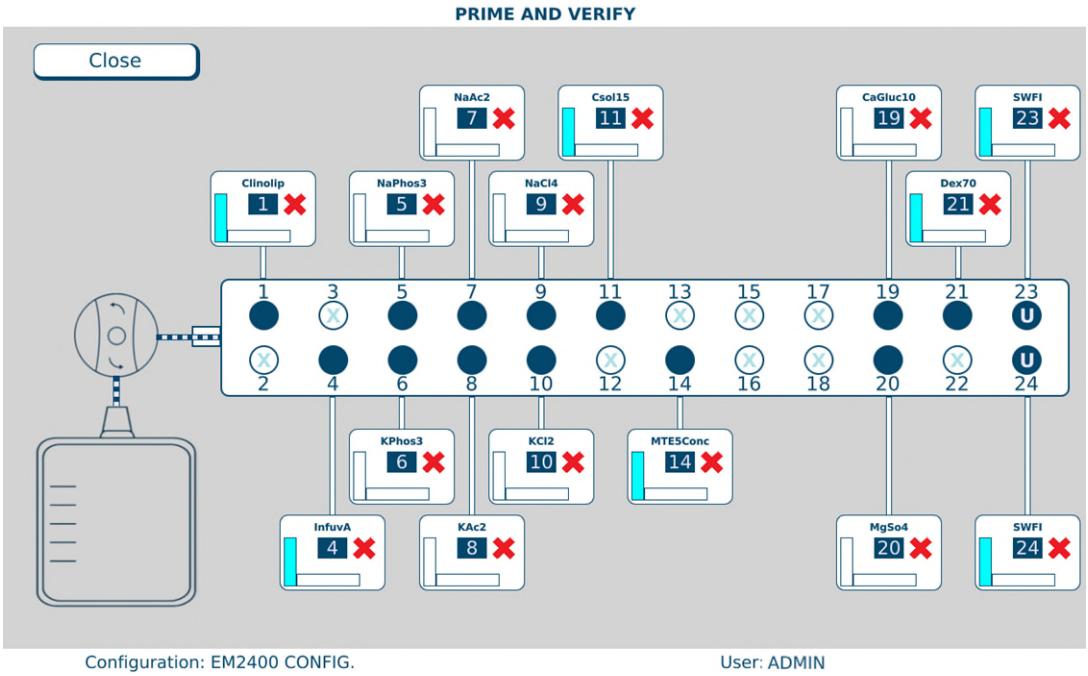
Message

   b. Enter a **Login** name.
   c. Enter a **Password**.
   d. Tap **Log In**, then continue with the next steps.



Cosignature window

When an X appears on the ingredient button, it indicates that priming and verification are needed.



PRIME AND VERIFY screen, no inlet primed

CAUTION

Do not prime calcium and phosphate ingredients consecutively. Interaction of these ingredients can cause a precipitate, which may block the common fluid pathway and require a replacement of the tube set.

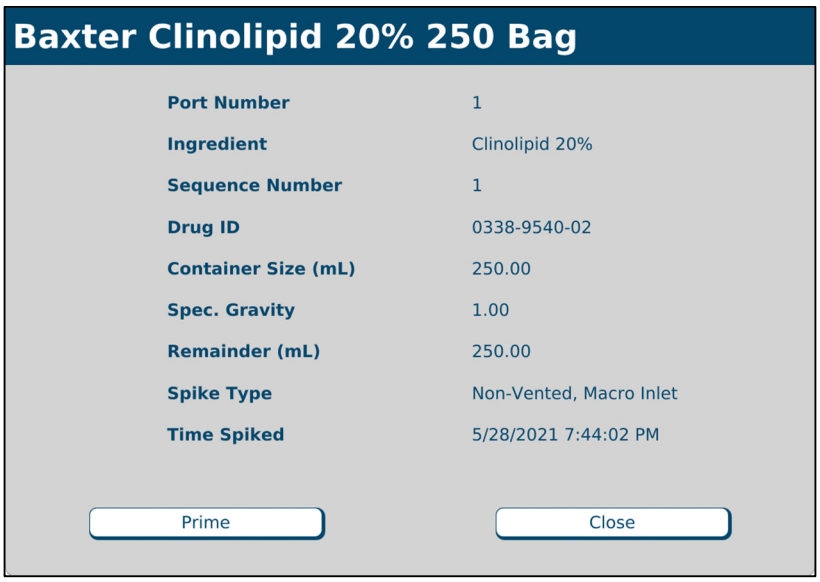
If the configuration includes a lipid, you should prime the Universal Ingredient immediately after priming the lipid.

Always follow the configuration setup that Baxter recommends, and prime ingredients in the sequence of the port numbers (1, 2, 3 and so on).

Tip! Baxter recommends physically rotating each source container so that its product label faces you, for easy verification.

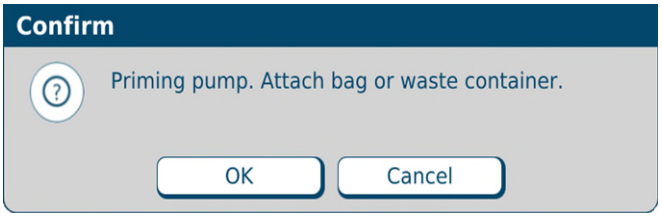
3. Tap an ingredient button.

   The ingredient detail window appears.



Ingredient detail window before priming

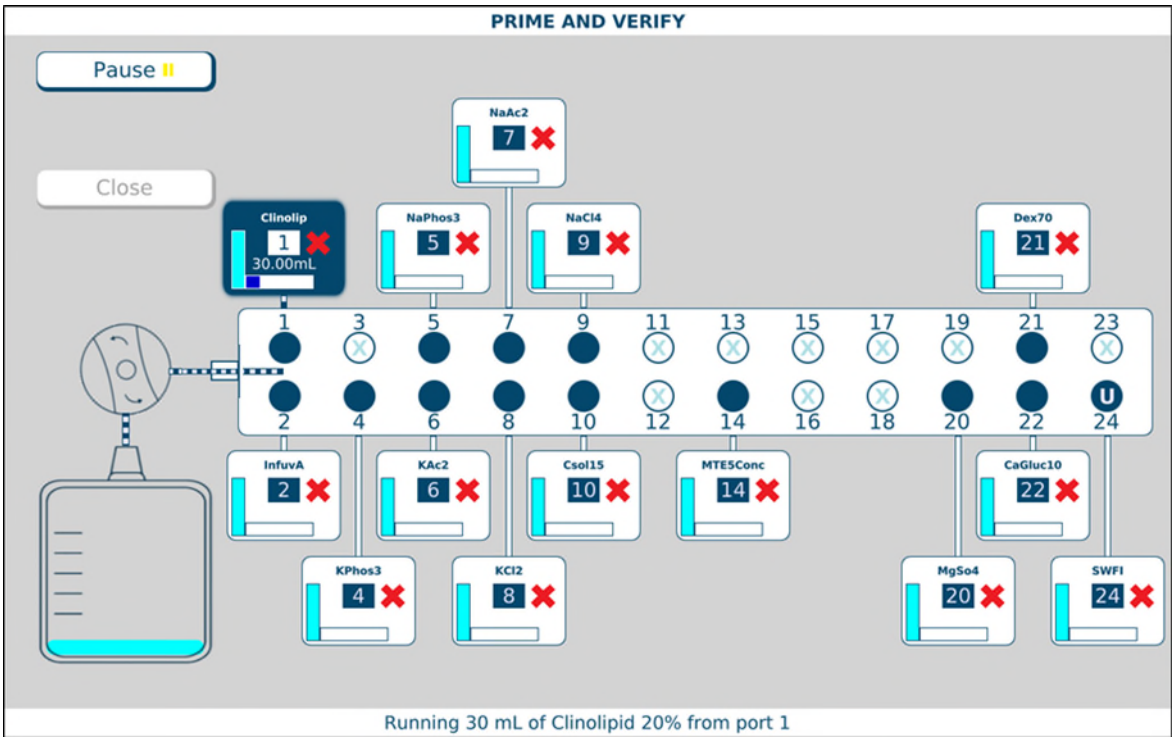
4. At the ingredient detail window, review the information.
   a. Check that the product information in the title bar of the window is correct.
   b. Check that the **Port Number** is correct.
   c. Check that the **Ingredient** description matches the source container to be used.
   d. Check that the **Remainder (mL)** matches the current volume of the source container to be used.
   e. Check that the **Spike Type** (inlet type) is correct.
5. On the valve set, locate the port for this ingredient.
6. With one hand, hold the inlet that is attached to the port, and with the other hand, follow the inlet up to the source container.
7. While continuing to hold the inlet near the source container:
   a. Check that the number on the inlet label matches the port number.
   b. Check that the product attached to the inlet matches the information on the screen.
   c. At the ingredient detail window, tap **Prime**.
   d. Check that a calibration bag is attached.
   e. At the *Priming pump* message, tap **OK**.



Message

f. Watch and feel for fluid moving through the inlet that is in your hand.

When an ingredient is being primed, its button becomes blue. The screen displays an animation of the process.



PRIME AND VERIFY screen, priming in progress

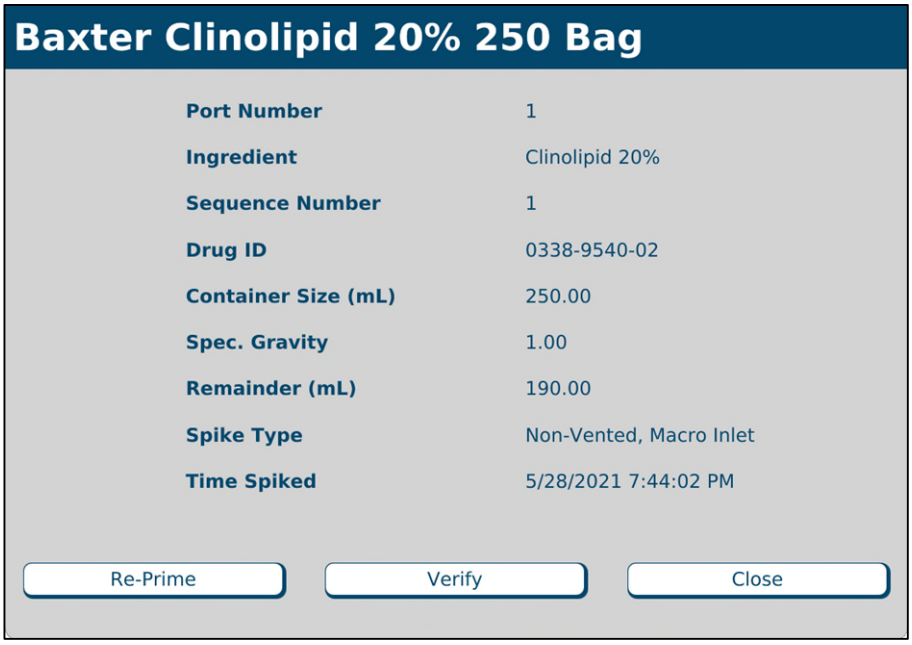
WARNING

The ingredient must be attached to the proper port. Patient harm can occur if the location of an ingredient is incorrect.

8. If the fluid:

- Does flow through the inlet that is in your hand, continue with the next step.
- Does not flow through the inlet that is in your hand, resolve any problems, check that the inlet is attached to the correct port and prime it again.

After the inlet has been primed, the ingredient detail window includes a **Verify** button, and the **Prime** button becomes a **Re-Prime** button.

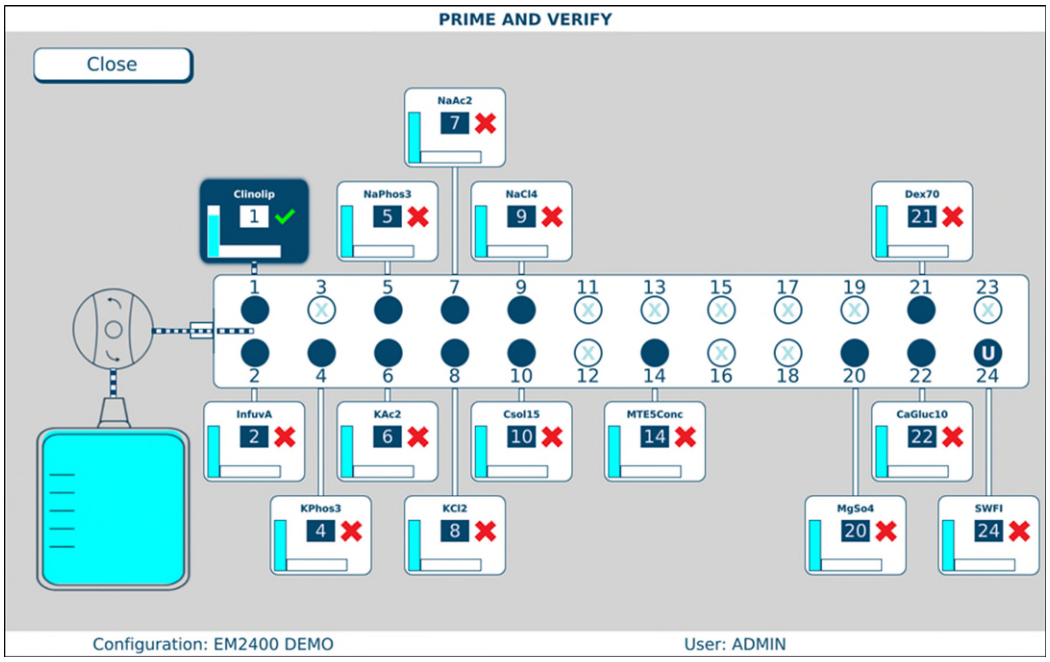


Ingredient detail window after priming

NOTE: The first prime uses the standard priming volume. Any subsequent primes use the minimum priming volume.

9. Check the inlet to be sure that it primed properly, leaving no air in the inlet tube. If necessary, tap **Re-Prime**.
10. When priming is finished:
    a. Release the tube from your hand.
    b. Tap **Verify** to confirm that the ingredient's inlet is attached to the correct port.

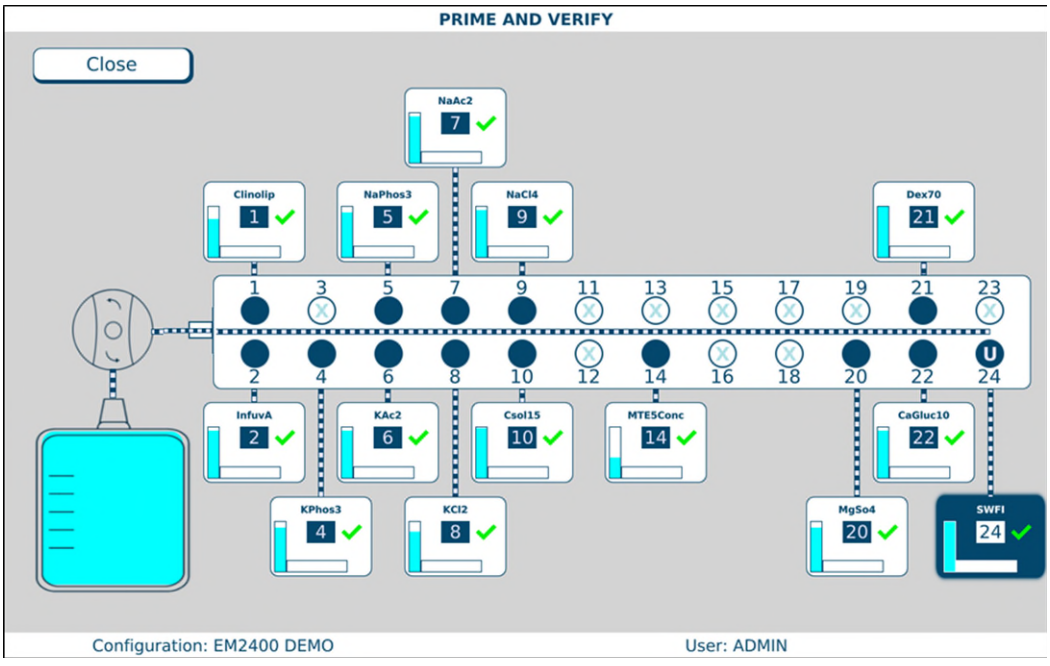
The connecting lines between the ingredient button and the port include horizontal marks, indicating that the ingredient has been primed. On the ingredient button, the red X becomes a green check mark, indicating that the ingredient has been verified.



PRIME AND VERIFY screen, one inlet primed and verified

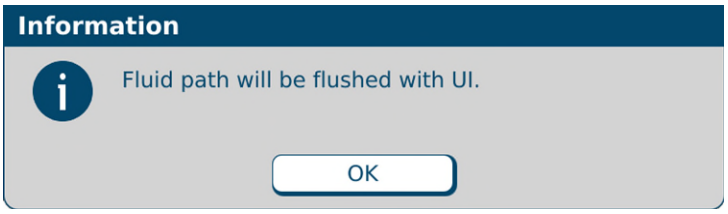
11. Repeat steps 3–10 for all the attached ingredients. If the calibration bag becomes full, remove it and attach a new one. Refer to Attaching and Removing the Calibration Bag on Page 68.

12. When you are finished, tap **Close**.



PRIME AND VERIFY screen, all inlets primed and verified

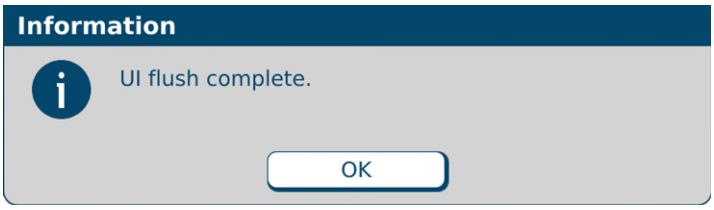
13. At the *Fluid path will be flushed with UI* message, tap **OK**.



Message

The compounder flushes the common fluid pathway with the Universal Ingredient, and tests for proper function of the occlusion detector. If the test fails, you cannot continue compounding a solution. Refer to Issues with the Occlusion Detector / “Flow Sensor” on Page 210.

14. At the *UI flush complete* message, tap **OK**.



Message

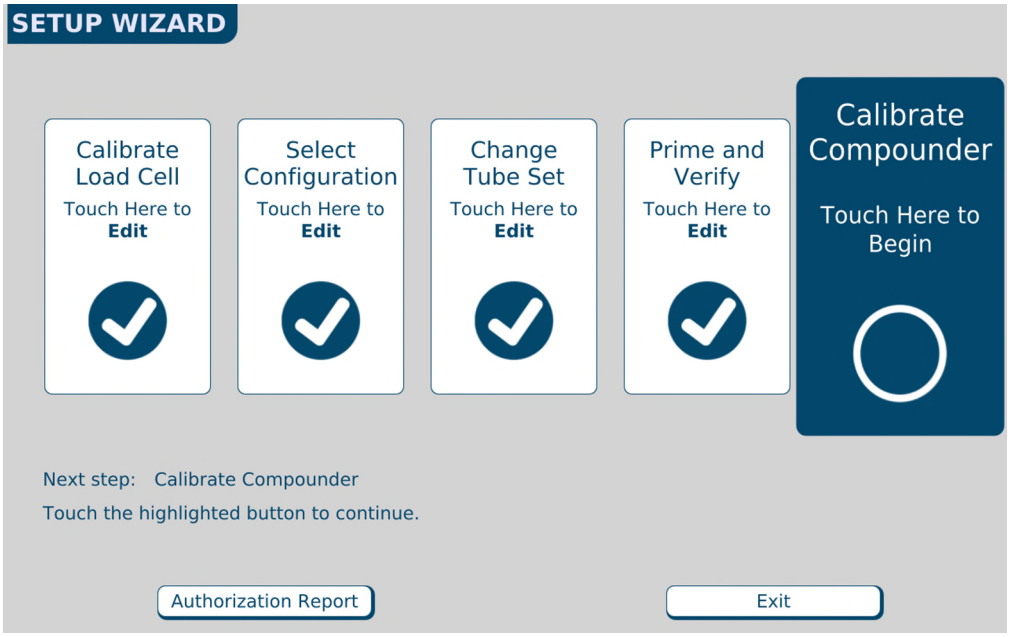
If a cosigner was logged in, the software automatically logs out the cosigner and logs in the original user.

If you started this procedure from the *Setup Wizard* screen, a check mark now appears in the **Prime and Verify** portion of the *Setup Wizard* screen.

CALIBRATING THE COMPOUNDER

This procedure calibrates the compounder's pump to ensure that it delivers the intended volume of each ingredient.

1. At the *Setup Wizard* screen, tap **Calibrate Compounder**.

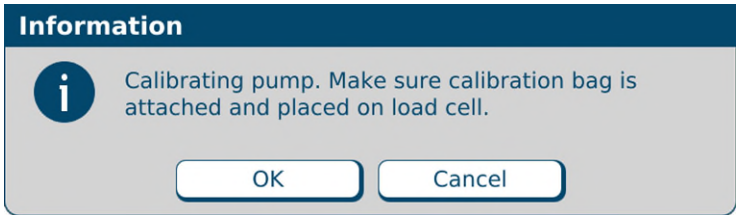


Setup Wizard screen, calibrating the compounder

NOTE: You can calibrate the compounder at any time by tapping **Compound > Calibrate Pump** at the menu screen.

CAUTION
A calibration bag must be used during all priming/verifying and Universal Ingredient flushes.

2. If a calibration bag is not already attached, attach it. Refer to Attaching the Calibration Bag on Page 68.
3. At the *Calibrating pump* message, tap **OK**.



Message

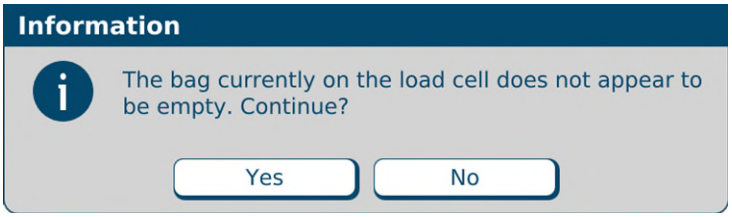
4. If the *Bag currently on the load cell does not appear to be empty* message appears, visually check the contents of the bag.
   - If the bag is empty, refer to The bag currently on the load cell does not appear to be empty on Page 209.
   - If the bag contains fluid, continue with the next step.

5. Check whether the bag has space for an additional 200 mL of fluid.
   - If the bag does not have space:

   a. Tap **No**.
   b. At the *Operation Cancelled* message, tap **OK**.
   c. Remove the calibration bag. Refer to Removing the Calibration Bag on Page 69.
   d. Attach an empty calibration bag. Refer to Attaching the Calibration Bag on Page 68.
   e. Return to Step 1.

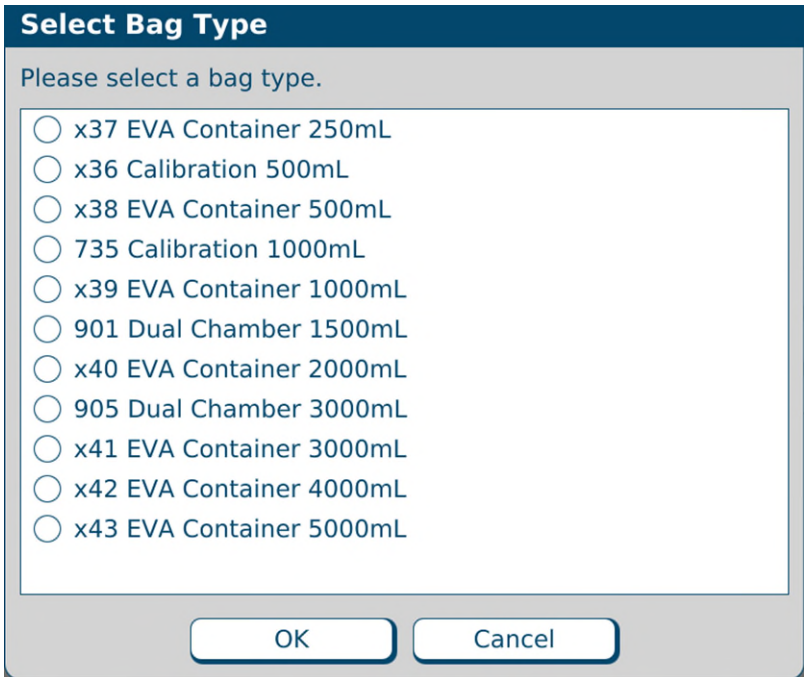
   - If the bag has space, tap **Yes**.

     IMPORTANT! It is acceptable to calibrate the pump when the calibration bag contains fluid. However, the calibration procedure is the only time you should tap **Yes** at this message. Never tap **Yes** when compounding a solution into a patient bag.



Message

6. At the *Select Bag Type* window:
   a. Select the type of bag you are using.
   b. Tap **OK**.



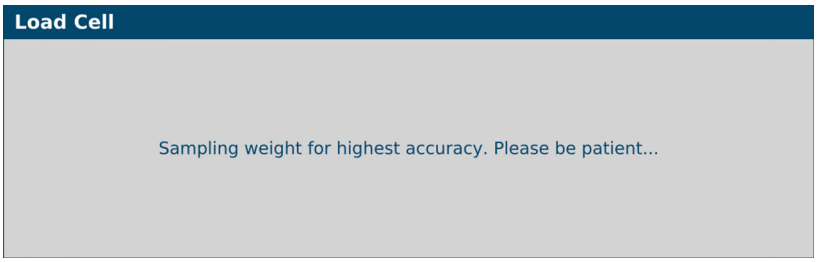
Select Bag Type window,
sample North American version

IMPORTANT! If any items touch the load cell during the calibration, the calibration will not be accurate.

7. Make sure that:
   - There is no weight on the load cell.
   - There is nothing touching any part of the load cell (for example, there are no cables touching the base).

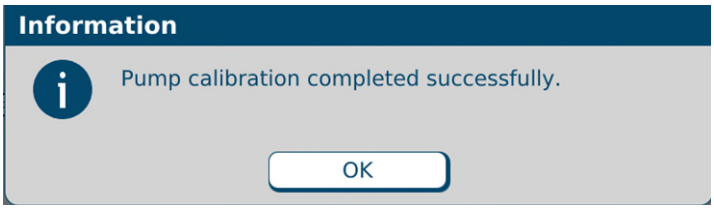
   The compounder pumps 100 mL of water, checks the weight, makes any necessary adjustments to the movement of the pump rotor, pumps 100 mL again and checks the weight again. If the Universal Ingredient (UI) for the configuration is something other than water, the compounder automatically flushes the common fluid pathway with the identified UI.

   This message appears and disappears:



Message

8. At the *Pump calibration completed successfully* message, tap **OK**.



Message

NOTE: If calibration fails, refer to Pump calibration failed on Page 207.

If you started this procedure from the *Setup Wizard* screen, a check mark now appears in the **Calibrate Compounder** portion of the *Setup Wizard* screen.

9. Remove the calibration bag. Refer to Removing the Calibration Bag on Page 69.

ATTACHING AND REMOVING THE CALIBRATION BAG

Attach and remove the calibration bag when other procedures direct you to do so.

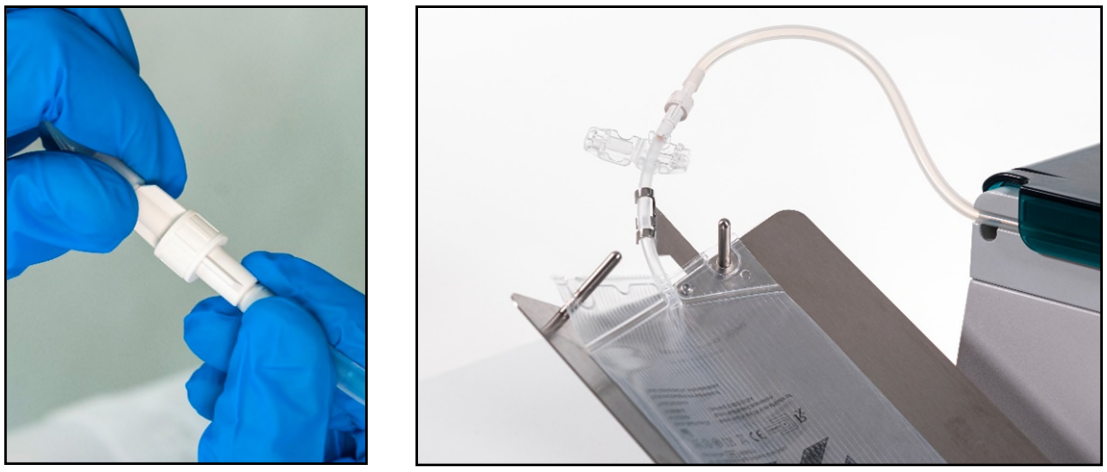
Attaching the Calibration Bag

Always use aseptic technique when attaching the bag.

1. Connect a sterile calibration bag to the outlet tube.

   Tip! Baxter recommends twisting the bag onto the outlet tube before attaching the bag to the load cell to prevent twisting or straining of the connection.

2. Attach the bag to the load cell. Place the holes in the corners of the bag over the guide pins on the load cell.
3. Route the bag's fill port through the load cell's fill port holder.
4. Make sure the outlet tube is curved, not twisted or kinked.



Attaching the calibration bag to the outlet tube and the load cell

Removing the Calibration Bag

Always use aseptic technique when removing the bag.

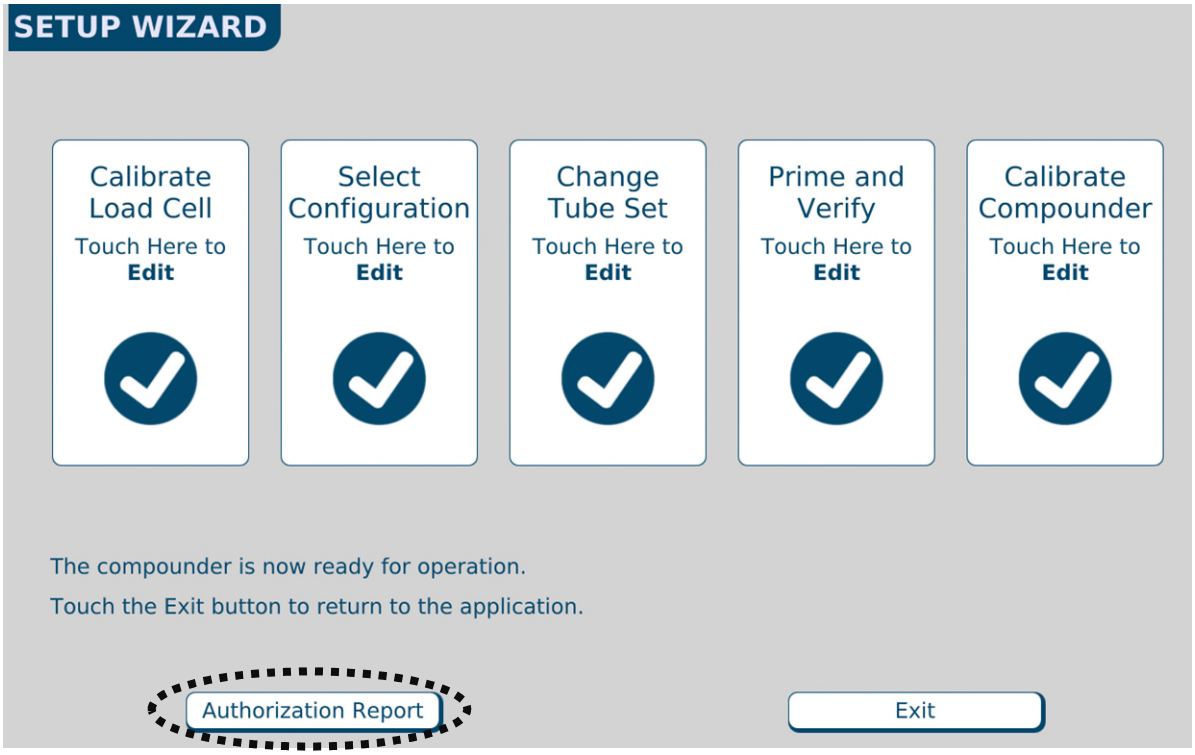
1. Remove the bag's fill port from the load cell's fill port holder.
2. Remove the bag from the load cell.
3. Clamp the bag's fill port, unless the bag is not full and it will be used for other recalibrations.
4. Disconnect the outlet tube from the bag.
5. Connect the end of the outlet tube to the tube holder on the vial rack.
6. Cap the bag's fill port.
7. Discard the bag, or if not full, set aside the bag for re-calibration or flushing.

NOTE: If saving the bag, keep it in the hood to preserve aseptic.

VIEWING THE AUTHORIZATION REPORT

When the setup steps are finished, the **Authorization Report** button becomes active at the *Setup Wizard* screen.

At the *Setup Wizard* screen, tap **Authorization Report**.



Setup Wizard screen, viewing the Authorization Report

NOTE: You can view the Authorization Report at any time by tapping **Reports > Authorization Report** at the menu screen.

For more information, refer to Authorization Report on Page 172.

To exit the *Setup Wizard* screen, tap **Exit**.

USING THE COMPOUNDER

After you finish setting up the compounder, you are ready to load formulas and fulfill orders.

FULFILLING THE ORDER (BASIC PROCESS)

Loading a Formula by Scanning a Barcode

Most facilities use this method.

IMPORTANT! This method requires:

- Order-entry software on a separate computer. This software must be able to produce both a .PAT/.FRM file and a corresponding label / report with a barcode. Both the .PAT/.FRM file and barcode must be compatible with the compounder. Alternatively, the software must also be able to produce a bag label, containing the formula details in the 2D barcode and the 2D formula barcode must also be compatible with the compounder. For more information, contact Baxter Technical Support. Refer to Getting Help on Page 20.
- Network connection between the order-entry computer and the compounder
- Barcode scanner at the compounder

The pharmacist creates an order in the order-entry software, which creates a .PAT/.FRM file that contains the patient information and the formula. A corresponding label with a barcode also prints at the same time. Alternatively, the order-entry software creates and prints a 2D Formula Barcode label which directly contains the patient information and the formula.

Baxter recommends the following process:

1. Attach the bag label to the patient bag.
2. Attach the patient bag to the compounder. Refer to Attaching the Patient Bag on Page 71.
3. Scan the barcode for the order.

   The compounder retrieves the order through the network and populates the pump screen with the patient name, formula serial number and volume of each ingredient to be pumped. The compounder reads the Drug ID number of each ingredient in the formula and matches this number to one in the formulary. In the United States, the Drug ID number is usually the National Drug Code (NDC).

WARNING

The Drug ID number for each product in the formula must exactly match the Drug ID number for that product in the compounder's formulary. If a Drug ID number is assigned to one product in the order-entry software, and that number is assigned to a different product in the compounder's formulary, the compounder will pump the wrong ingredient, resulting in patient harm. *It is the user's responsibility to ensure that Drug ID numbers are properly and consistently assigned in both systems.*

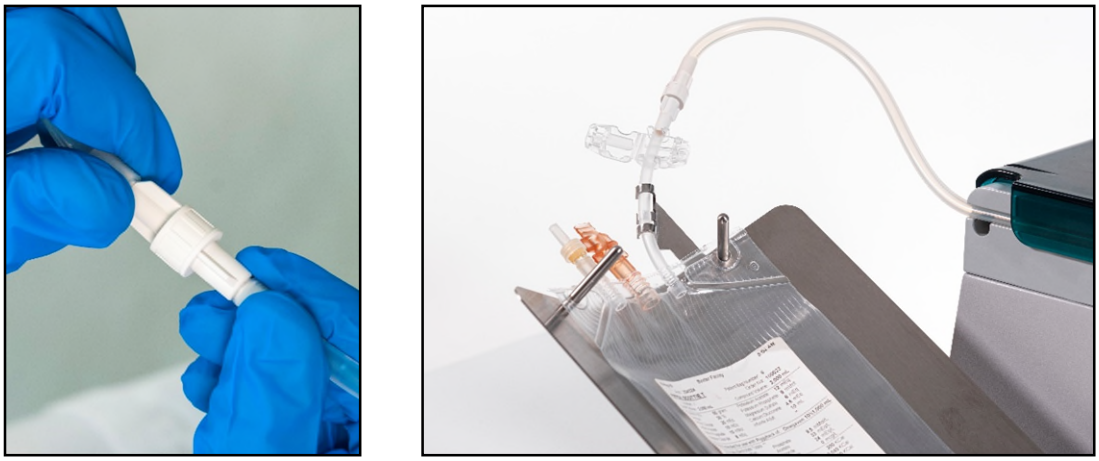
NOTE: If any ordered ingredients are not in the configuration on the compounder, are not allowed as auto-additions or have a volume less than 0.2 mL, the compounder software will identify these ingredients as manual additions.

Attaching the Patient Bag

Always use aseptic technique when attaching the bag.

1. Connect a sterile patient bag to the outlet tube.

   Tip! Baxter recommends twisting the bag onto the outlet tube before attaching the bag to the load cell to prevent twisting or straining of the connection.
2. Attach the bag to the load cell. Place the holes in the corners of the bag over the guide pins on the load cell.
3. Route the bag's fill port through the load cell's fill port holder.
4. Make sure the outlet tube is curved, not twisted or kinked.

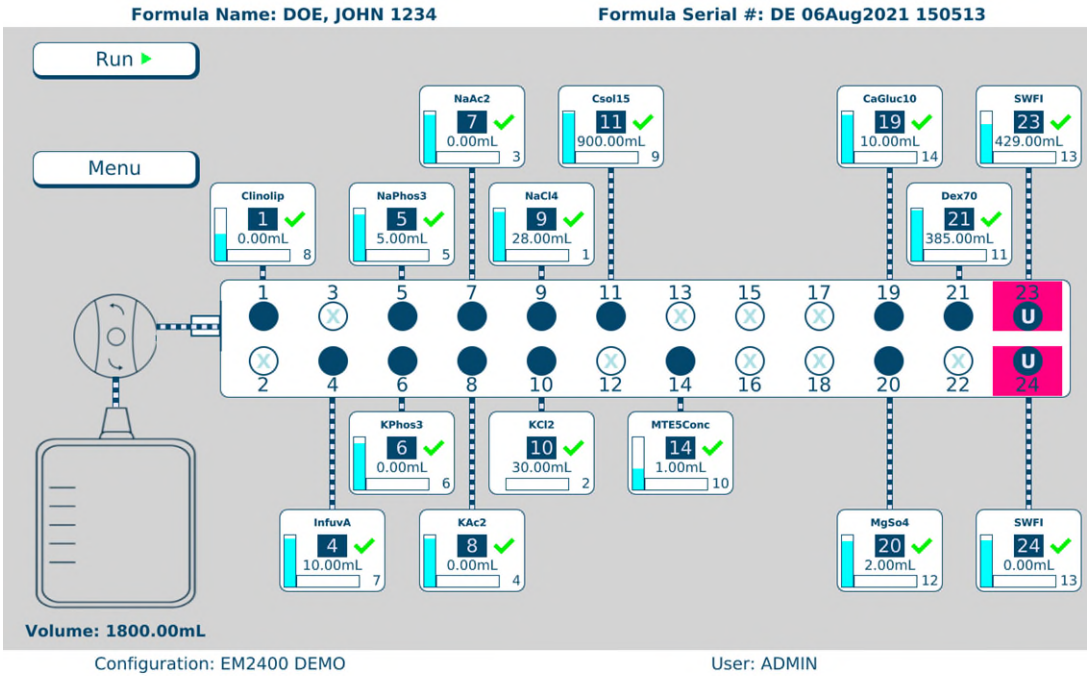


Attaching the patient bag to the outlet tube and the load cell

Compounding the Solution

IMPORTANT! This function requires Compounder permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

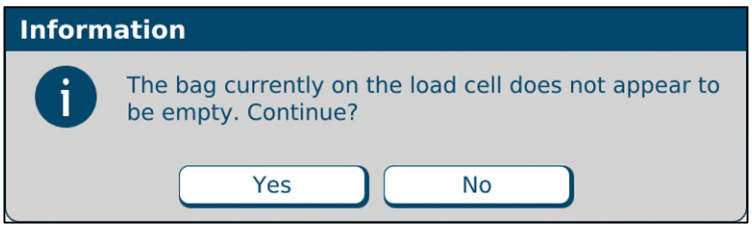
5. At the pump screen, verify the patient's name and bag serial number at the top of the screen matches the name and serial number on the bag. If they match, tap **Run**.



Pump screen, ready to start compounding the solution

6. If the message shown below appears, visually check the contents of the bag.

- If the bag is empty, refer to The bag currently on the load cell does not appear to be empty on Page 209.
- If the bag contains fluid:
  a. Tap **No**.
  b. At the *Operation Cancelled* message, tap **OK**.
  c. Remove the bag. Refer to Removing the Patient Bag on Page 75.
  d. Attach an empty bag. Refer to Attaching the Patient Bag on Page 71.
  e. Return to Step 1.



Message

WARNING

If you tap **Yes**, the compounder will reset the measured weight to zero, despite the fact that the bag contains fluid.

The finished solution may contain an unintended volume or ingredient, even if the final measured weight is within the acceptable range. This unintended volume or ingredient may result in patient harm.

The **Details** section of the MixCheck Report will indicate that you continued compounding despite the warning that the bag did not appear to be empty.

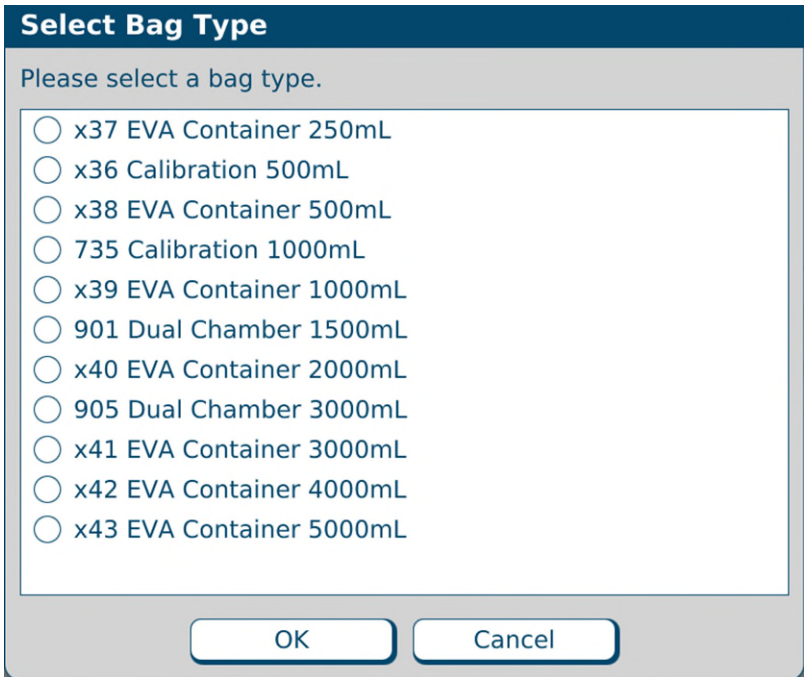
For instructions on how to handle a finished bag in this situation, refer to your facility's protocol.

7. At the *Select Bag Type* window:

a. Select the size of the bag you attached.

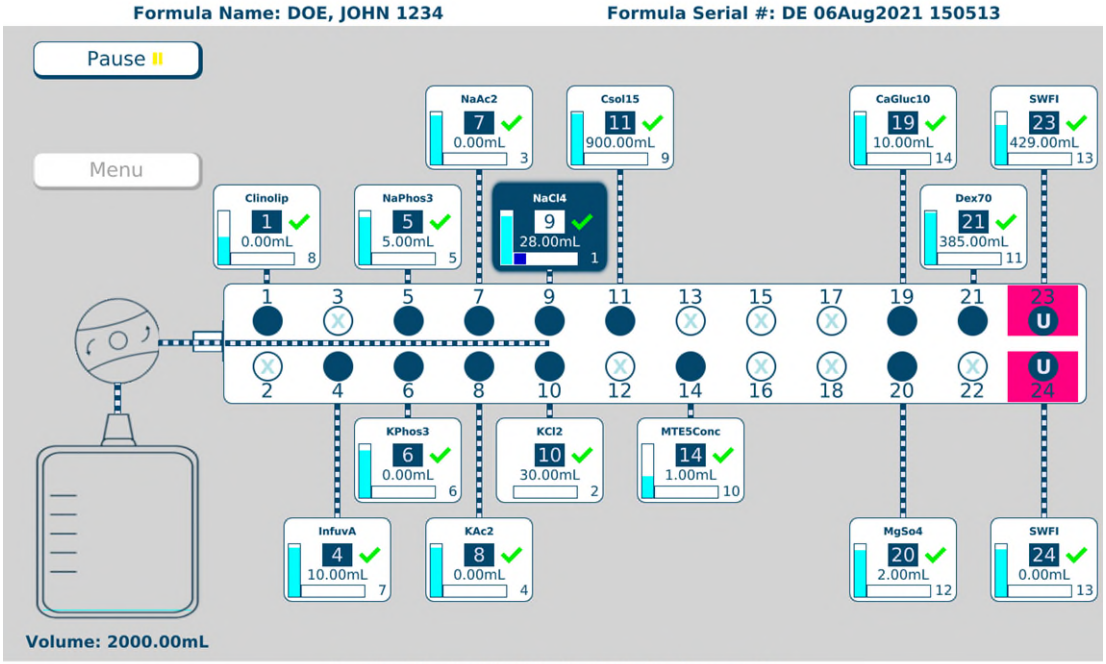
NOTE: Only bags capable of holding the total volume of the order will be shown.

b. Tap **OK**.



Select Bag Type window

At the pump screen, the **Run** button becomes a **Pause** button. The compounder pumps each ingredient, one at a time into the patient bag in the specified sequence and volume. When an ingredient is being pumped, its button becomes blue.



Pump screen, compounding the solution

NOTE: For information about messages that might appear just before or during the compounding process, refer to Fulfilling the Order (Other Common Activities) on Page 82.

If you need to stop compounding temporarily, you can perform either of the following actions. The MixCheck Report will indicate that you performed the action.

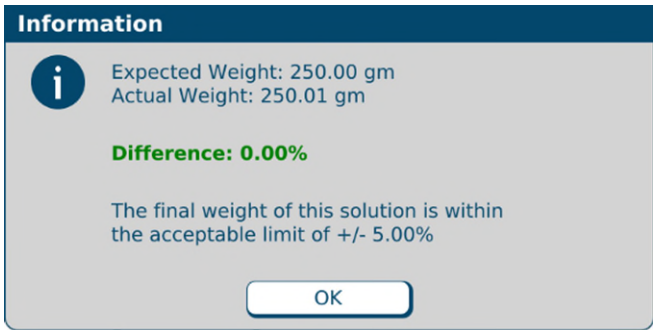
- Tap **Pause**, then tap **Resume** to start compounding again.
- Open the pump door, then close the pump door and tap **Resume** to start compounding again.

When compounding is finished, a message displays this information about the patient bag:

- Expected weight
- Actual weight
- Difference
- Statement about whether or not the difference is acceptable

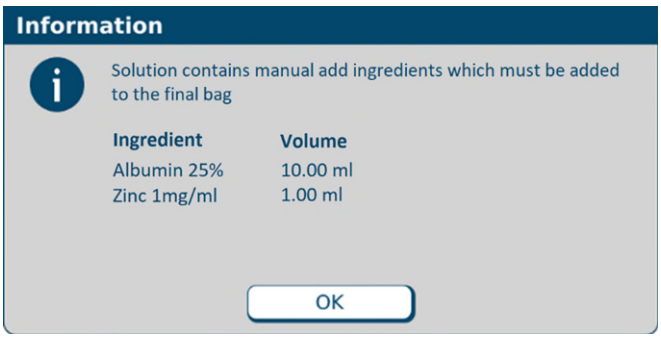
NOTE: If the difference is not acceptable, refer to Issues with the Weight and Load Cell on Page 208. The acceptable difference is typically set to ± 5%. To change this setting, refer to Acceptable Weight Variances on Page 105.

8. At the message with information about the patient bag, tap **OK**.



Message

9. If the selected formula contained manual add ingredients, the following message will appear as a reminder, tap **OK.**



Message

Removing the Patient Bag

Always use aseptic technique when removing the bag.

1. Remove the bag's fill port from the load cell's fill port holder.
2. Clamp the bag's fill port according to facility protocol.
3. Remove the bag from the load cell.
4. Disconnect the outlet tube from the bag.
5. Connect the end of the outlet tube to the tube holder on the vial rack.
6. Cap the bag's fill port.

Completing the Order

WARNING

It is important to inspect the finished solution to make sure that it complies with standards.

1. If necessary, perform any manual additions. Refer to Performing a Manual Addition on Page 84.
2. Visually inspect the finished solution in the patient bag for precipitates and particulates. Follow your facility's protocol.
3. View and approve the MixCheck Report according to your facility's protocol. For instructions, refer to MixCheck Report on Page 167.

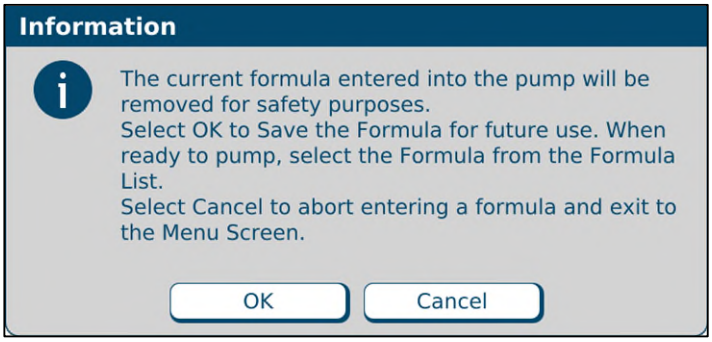
UNDERSTANDING AUTOMATIC UNLOADING OF FORMULAS

As a safety precaution, the software automatically unloads the formula in these two situations:

- The software unloads the formula if you leave the pump screen after loading the formula and before starting the compounding process.

  The message below, or one similar to it, appears and then automatically disappears.

  The only exception is that the software does not unload the formula when you perform an auto-addition.



Message

- The software usually unloads the formula when compounding is finished, regardless of the outcome.

  No message appears; however, you cannot use the formula for compounding again.

  The only exception is that the software does not unload the formula when both of the following conditions occur together:

  - The solution limit is more than 1 and has not yet been met, or the solution limit is disabled. For more information, refer to Solution Limit on Page 108.
  - Barcode scanning is not required to load a formula, but the formula was loaded through this method. For more information, refer to Barcode scanner on Page 108.

  NOTE: In the event there is a power interruption during compounding, upon restarting the compounder and initiating pumping, the formula will be unloaded and the system will perform a flush as follows:

  - Power interruption during pumping – prime and verify the open port, then flush occurs.
  - Power interruption during idle state – formula unloads, then flush occurs.

  Write a large “X” on the label of the patient bag after the flush, then remove and discard the bag.

OTHER METHODS OF LOADING THE FORMULA

There are several methods for loading a formula onto the compounder. They are:

- Automatically loading a formula by scanning a barcode to retrieve the .PAT/.FRM file (recommended)
- Automatically loading a formula by scanning the 2D formula barcode containing the formula details.
- Manually entering a formula through direct entry
- Manually selecting a saved formula

Tip! Baxter strongly recommends loading a formula by scanning a barcode, and using the manual entry or selection methods only when the barcode method fails. If the network connection to the order-entry system fails, you can still load a formula by scanning a barcode. For instructions, refer to Loading a Formula by Connecting a USB Drive on Page 213.

NOTE: To enable barcode scanning (and, if desired, to require it for loading formulas), refer to Barcode scanner on Page 108.

Entering a Formula through Direct Entry

Some facilities may use this method if the order-entry software is temporarily unavailable. With this method, you must manually enter the volume of each ingredient to create a new formula.

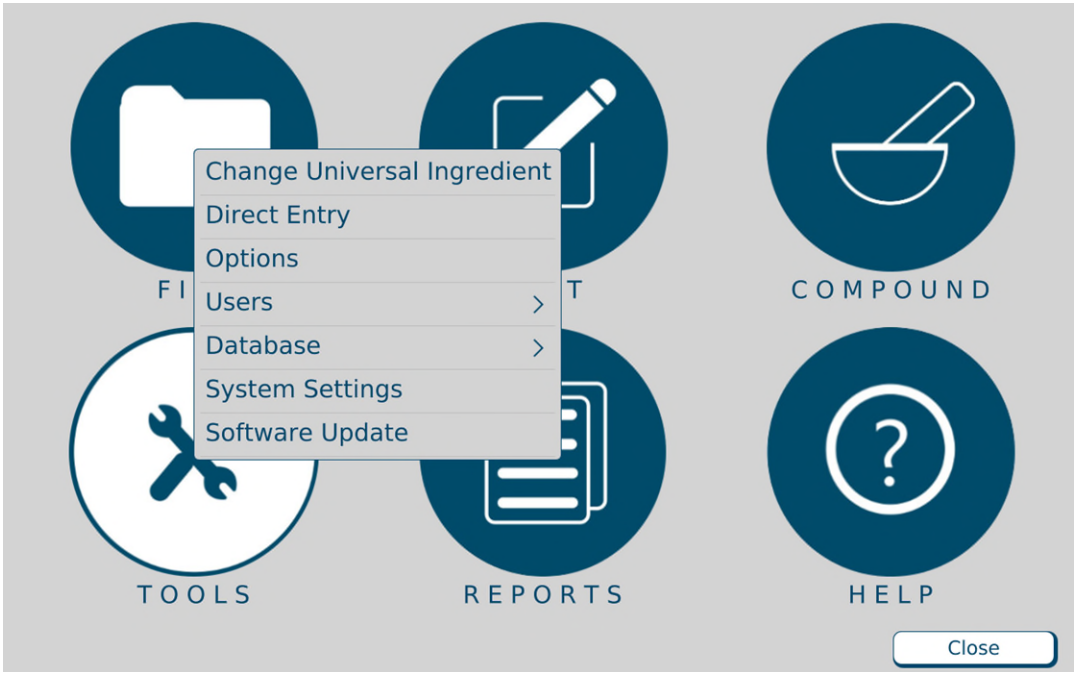
This process creates a formula with a unique ID, but it does not create a 2D Formula Barcode/.PAT/.FRM file or a corresponding label with a barcode.

WARNING

Formulas entered directly into the compounder should be checked by a pharmacist. The compounder does not verify the formulas.

IMPORTANT! This function requires Formula Entry permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

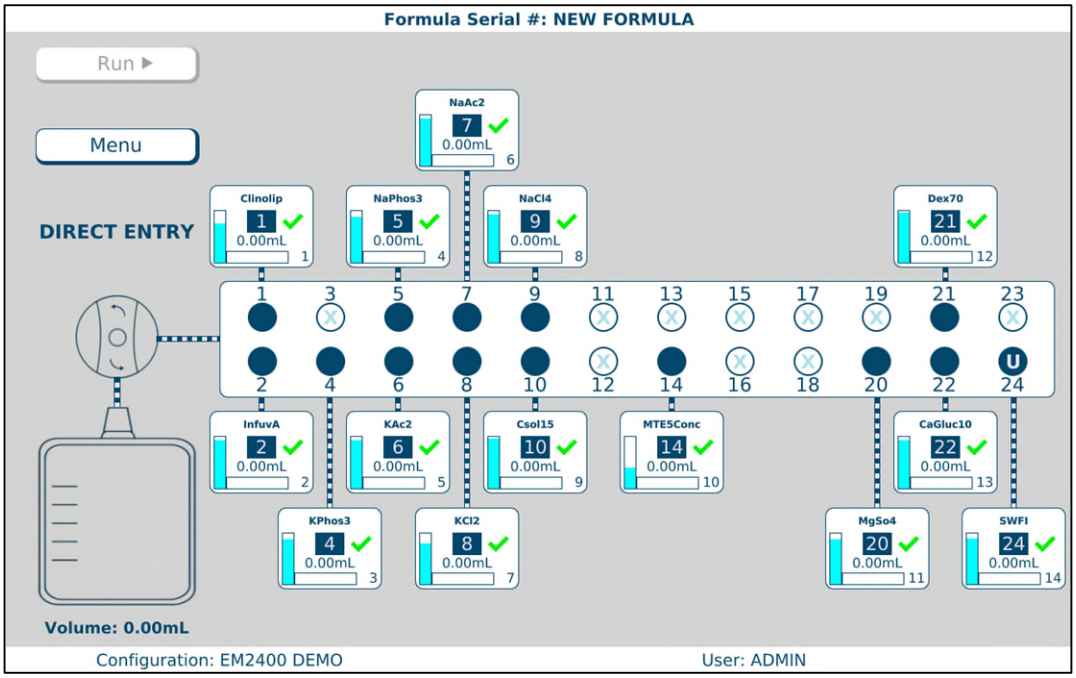
1. At the menu screen, tap **Tools > Direct Entry**.



Menu screen, Tools menu

NOTE: To stop using direct entry, you can tap **Tools > Cancel Direct Entry** at the menu screen.

The pump screen appears. The text **DIRECT ENTRY** appears on the left side.



Pump screen during direct entry

2. Obtain the formula from the pharmacist. Refer to your facility's protocol.

3. Tap the ingredient button for the first ingredient in the formula.

   The ingredient detail window appears.

Ingredient detail window during direct entry

4. At the ingredient detail window:
   a. Check that the **Ingredient** shown matches the ingredient ordered. Check its description, concentration and so on.
   b. Enter the **Ordered Volume** of the ingredient to be delivered.

      NOTE: Volumes will be rounded to 2 decimal places.

   c. Tap **Save** or tap **Next** to view the next ingredient detail window.

      The **Run** button becomes available on the pump screen.
5. Repeat steps 3–4 for each ingredient in the formula.
6. If you want to:
   - Use the formula now, continue with Saving and Using a Direct-Entry Formula on Page 80.
   - Save the formula for using later, continue with Saving a Direct-Entry Formula to Use Later on Page 80.

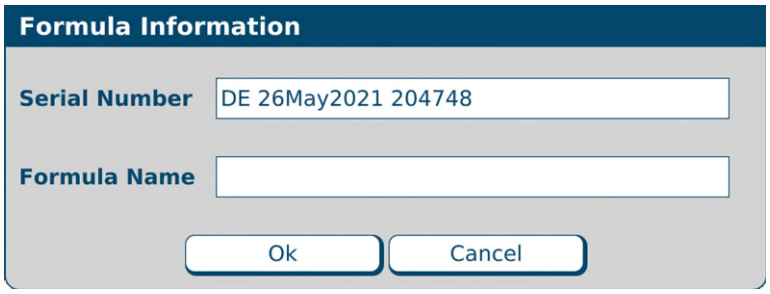
Saving and Using a Direct-Entry Formula

NOTE: For information about automatic unloading of formulas, refer to Understanding Automatic Unloading of Formulas on Page 76.

1. Attach the patient bag. Refer to Attaching the Patient Bag on Page 71.
2. At the pump screen, tap **Run**.
3. At the *Formula Information* window:
   a. Enter a **Formula Name**.
   b. If desired, enter a new **Serial Number**.

      Tip! Baxter recommends not changing the serial number.

   c. Tap **OK**.



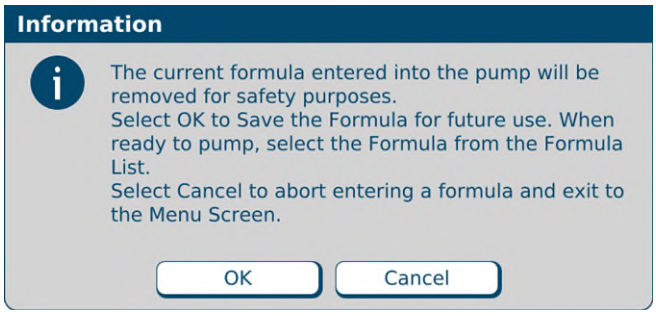
Formula Information window

4. Continue with Compounding the Solution on Page 72.

   NOTE: You do not need to tap **Run** again.

Saving a Direct-Entry Formula to Use Later

1. At the pump screen, tap **Menu**.
2. At the *Information* message, tap **OK**.

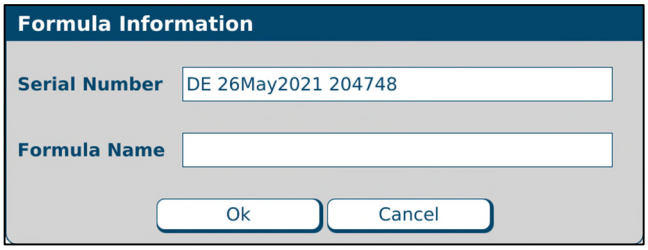


Message

3. At the *Formula Information* window:
   a. Enter a **Formula Name**.
   b. If desired, enter a new **Serial Number**.

      Tip! Baxter recommends not changing the serial number.

   c. Tap **OK**.



Formula Information window

4. When you want to compound the solution, continue with Selecting a Saved Formula on Page 81.

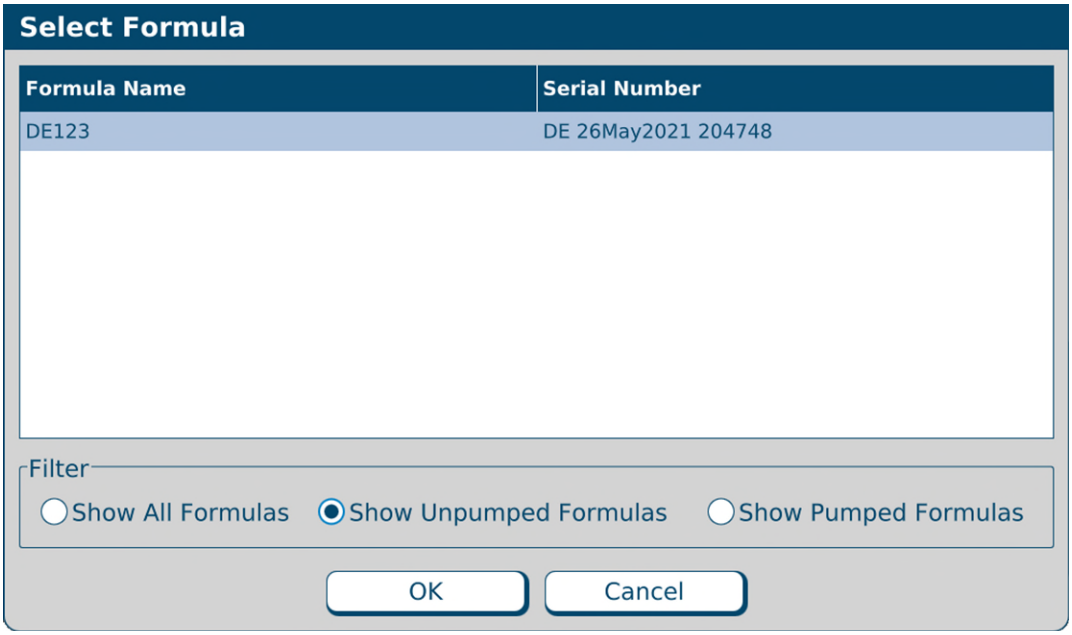
Selecting a Saved Formula

Some facilities may use this method to select a saved formula, which has already been loaded onto the compounder by scanning a barcode or direct entry.

IMPORTANT! This function requires that formulas can be loaded without scanning barcodes. For more information, refer to Barcode scanner on Page 108.

1. At the menu screen, tap **Compound > Select Formula**.

   The *Select Formula* window appears.



Select Formula window

2. At the *Select Formula* window, tap one of these filter options:
    - **Show All Formulas** to view all the formulas that are stored
    - **Show Unpumped Formulas** to view all the formulas that have not been used for compounding
    - **Show Pumped Formulas** to view all the formulas that have been used for compounding

    Tip! Baxter recommends selecting only **Show Unpumped Formulas**.

    NOTE: You can tap **Formula Name** to sort by name or tap **Serial Number** to sort by number. Formulas are stored for a specified time period. To set up the storage of formulas, refer to Storage on Page 103.
3. Select a formula.
4. Tap **OK**.

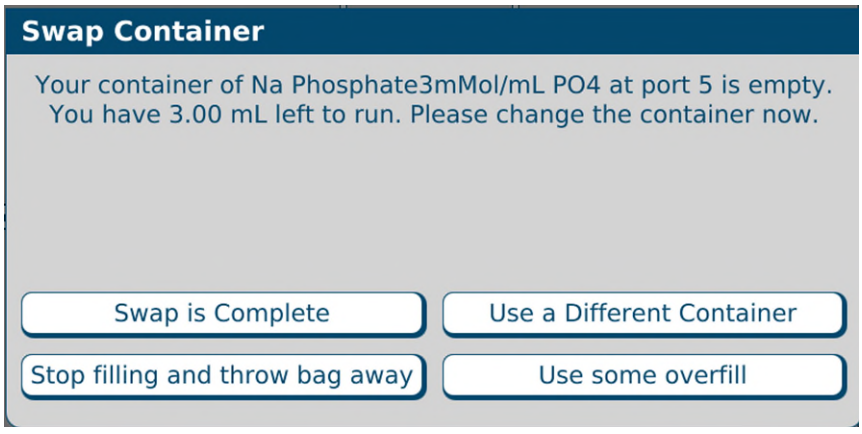
    The formula is loaded and appears on the pump screen.
5. Continue with Fulfilling the Order (Basic Process) on Page 70.

FULFILLING THE ORDER (OTHER COMMON ACTIVITIES)

To complete some orders, you may need to perform additional steps along with the basic steps already explained. Interruptions to the compounding process may occur. These additions and interruptions are part of normal operation.

Replacing a Source Container

If you are fulfilling a series of orders, an ingredient may become depleted and may need to be replaced. When a formula is loaded and requires more ingredient volume than what remains in the source container, the vertical bar on the ingredient button flashes. You can replace the container now or start compounding. If you start compounding, the *Swap Container* window appears when the source container is almost empty.



Swap Container window

1. Check that the source container is appropriately depleted.

WARNING

If there is a large amount of fluid remaining in the source container, or if the container has emptied completely and forced air into the inlet, there may be a delivery problem. For assistance with troubleshooting, contact Baxter Technical Support. Refer to Getting Help on Page 20.

2. At the *Swap Container* window, tap one of these options:
   - Tap **Swap is complete** to replace the empty container with an exact match (same ingredient, container size, container type and manufacturer). Use aseptic technique to replace the source container.
   - Tap **Use a different container** to replace the empty container with the same ingredient from a different container size, container type or manufacturer. Use aseptic technique to replace the source container.

     NOTE: This is the recommended action.

WARNING

The remainder value in the software must accurately represent the actual volume remaining in the source container. Change a remainder value only when you know the precise amount remaining in the source container. Incorrect remainder values can lead to bubbles, occlusions, and under-delivery of an ingredient if its source container runs empty.

NOTE: Using a different container may require you to change and prime the inlet. Refer to Attaching the New Ingredients and Inlets on Page 45 and Priming and Verifying on Page 54.

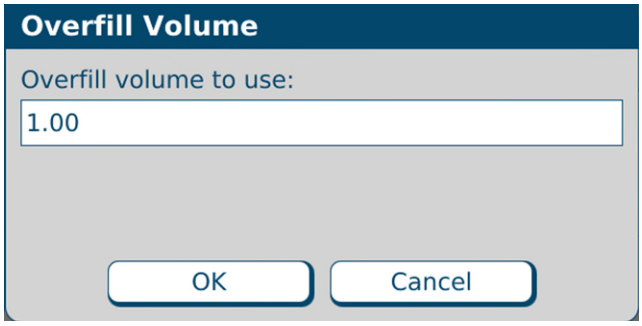
   - Tap **Stop filling and throw bag away** to cancel the order. At the pump screen, tap **Stop** and follow the on-screen instructions.
   - Tap **Use some overfill** to use the fluid remaining in the current container to complete the order. At the *Overfill Volume* window:

a. Enter the **Overfill volume to use**.

WARNING

Adjusting the value improperly in the **Overfill volume to use** field can lead to bubbles, occlusions and under-delivery of an ingredient if its source container runs empty.

b. Tap **OK**.



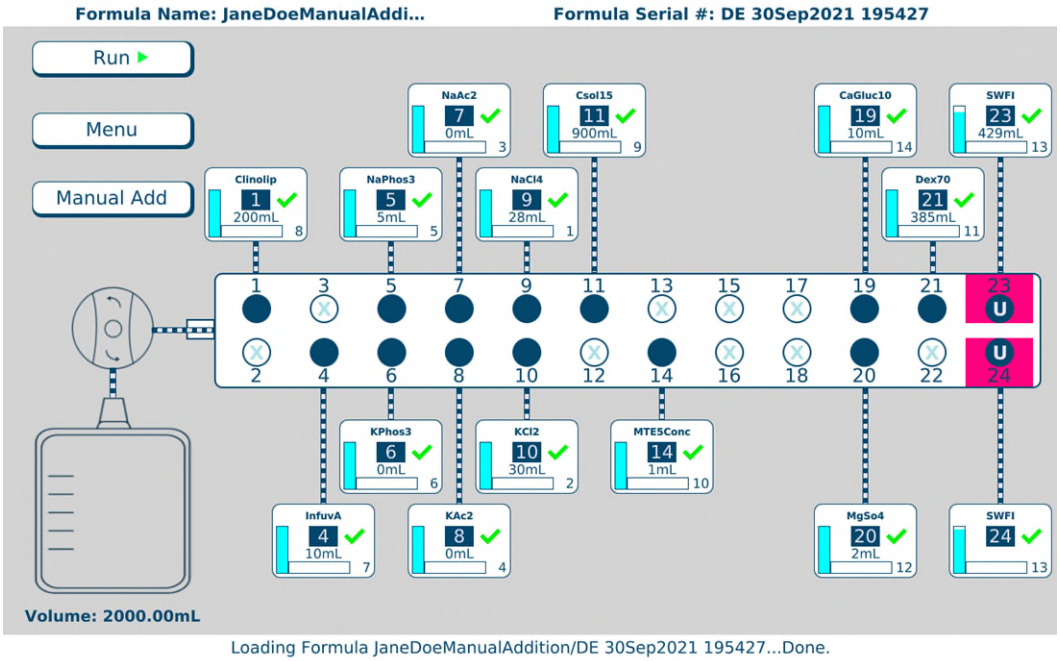
Overfill Volume window

Performing a Manual Addition

A manual addition allows you to add an ingredient to the finished solution manually. This type of addition may be necessary when the loaded formula includes an ingredient that meets one or more of these conditions:

- It is not in the configuration.
- It is not identified as an allowable auto-addition.
- Its ordered volume is less than the 0.2 mL minimum required for use on the compounder.

If a formula loaded by scanning a barcode includes an ingredient that must be added manually:



Pump screen with manual addition

- A **Manual Add** button appears on the left side of the pump screen. You can tap this button to view information about the ingredients that must be added manually.
- The MixCheck Report includes a list of any ingredients that must be added manually. For more information, refer to MixCheck Report on Page 167.

To add ingredients manually, follow your facility's protocol.

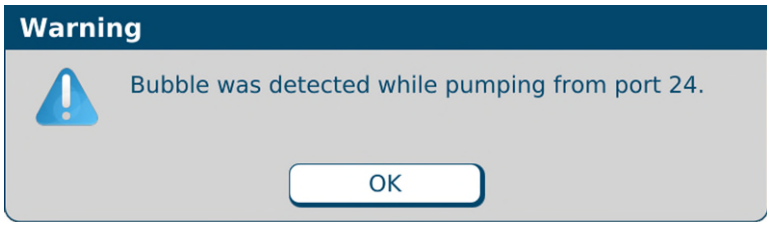
NOTE: To set the maximum volume allowed for a manual addition, refer to Manual Add on Page 106.

Handling an Air Bubble

An air bubble can occur at any time, but it most frequently occurs after attaching a source container and priming the inlet. A bubble can be caused by an improperly spiked container, an empty container or incomplete priming.

When the bubble detector finds a bubble in the outlet tube over the detector, the compounding process stops and an alarm beeps. A message also appears.

1. At the *Bubble was detected while pumping from port <port number>* message, tap **OK**.



Message

NOTE: This does not mean that the bubble came from port 24. The bubble could have come from any of the previous ingredient deliveries.

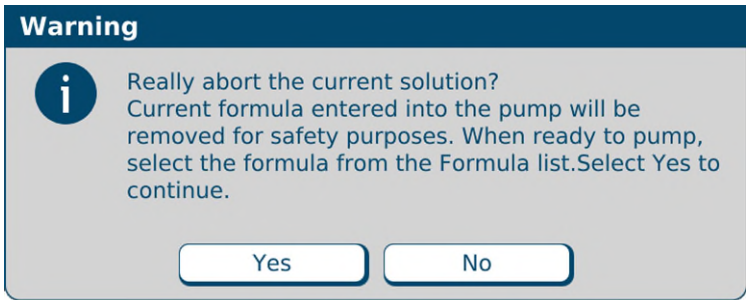
IMPORTANT! A bubble in the common fluid pathway displaces the volume of one or more ordered ingredients, causing an under-delivery of these ingredients.

2. Determine the impact of the bubble:
   a. Check the size of the bubble using the EM2400 Bubble Chart to determine the volume of fluid displaced. Use the macro side of the bubble chart to determine the size of the bubbles within the tube set.
   b. If more than one bubble is present, evaluate each bubble and add the values together to determine the total volume of fluid displaced.
   c. Identify all the ingredients pumped prior to the alarm, the ingredient pumped during the alarm and the volume of each ingredient ordered.

   Tip! Baxter recommends that a pharmacist evaluate the clinical significance of bubbles encountered during the compounding process.
3. Ask a pharmacist to determine if the displaced volume is clinically significant for any of the ingredients pumped. Assume that the total displaced volume applies to each ingredient ordered.
4. If the clinical significance:
   - Is acceptable, tap **Resume** at the pump screen to continue compounding the solution, and do not continue with the steps below
   - Is not acceptable, or cannot be determined, continue with the next step to cancel the order

   Tip! Baxter recommends documenting all decisions according to your facility's protocol.
5. Immediately write a large "X" on the label of the patient bag.
6. At the pump screen, tap **Stop**.

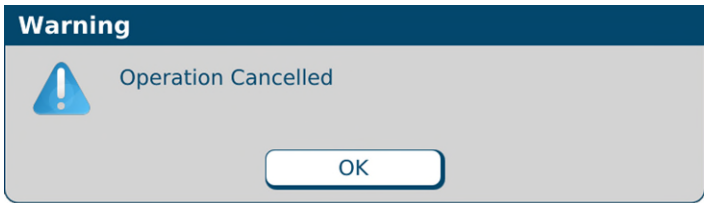
7. At the *Really abort the current solution?* message, tap **Yes**.



Message

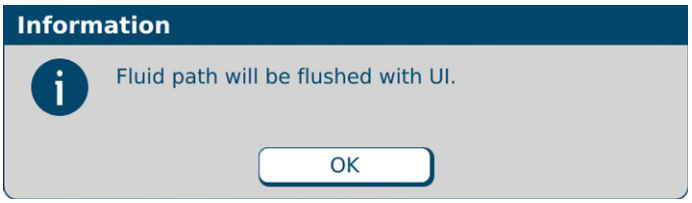
The software unloads the formula.

8. At the *Operation Cancelled* message, tap **OK**.



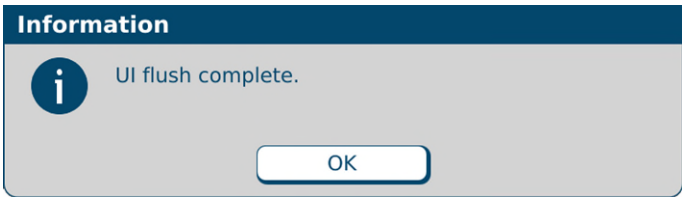
Message

9. At the *Fluid path will be flushed with UI* message, tap **OK**.



Message

10. Check that the fluid moves properly during the flush.
11. At the *UI flush complete* message, tap **OK**.



Message

12. Remove the bag. Refer to Removing the Patient Bag on Page 75.
13. Discard the bag.

NOTE: To help reduce the occurrence of bubbles and make their detection more accurate, you can:

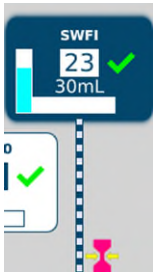
- Use proper technique to spike the containers. Refer to the steps for spiking a container, starting on Page 48.
- Re-prime any inlets that have visible bubbles. Refer to Priming the Inlets and Verifying the Setup on Page 58.
- Increase the priming volume in the configuration. Refer to Adding or Editing a Configuration on Page 133.
- Clean the channel over the bubble detector. Refer to Cleaning the Compounder on Page 92.
- Make sure that the outlet tube is in the proper position. It should be at the bottom of the channel over the bubble detector. Refer to Step 7a on Page 43.

Handling an Occlusion

An occlusion can be caused by an empty syringe, stuck syringe plunger, kinked tube or other obstruction in the inlet.

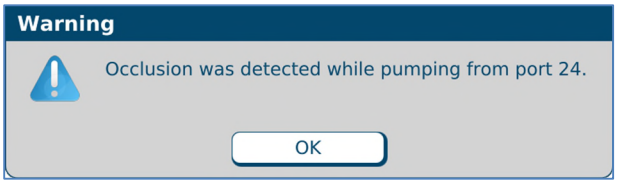
When the occlusion detector detects that a vacuum was drawn, indicating an occlusion somewhere between the source container and the detector, the compounding process stops and an alarm beeps. A message appears, and a red occlusion symbol also appears near the ingredient button.

IMPORTANT! When an occlusion is detected, the amount of ingredient delivered from the source container is unknown. Baxter recommends discarding the bag.



Occlusion symbol

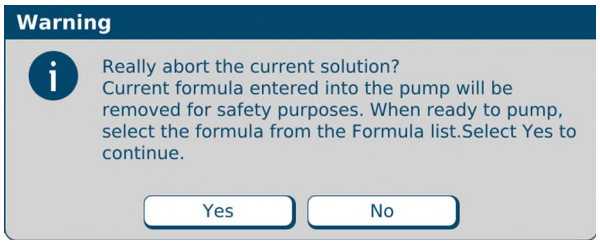
1. Immediately write a large “X” on the label of the patient bag.
2. At the *Occlusion was detected while pumping from port <port number>* message, tap **OK**.



Message

3. At the pump screen, tap **Stop**.

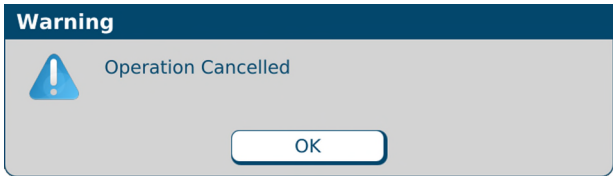
4. At the *Really abort the current solution?* message, tap **Yes**.



Message

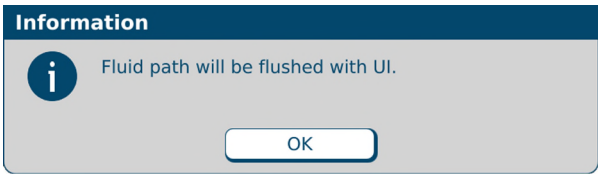
The software unloads the formula.

5. At the *Operation Cancelled* message, tap **OK**.



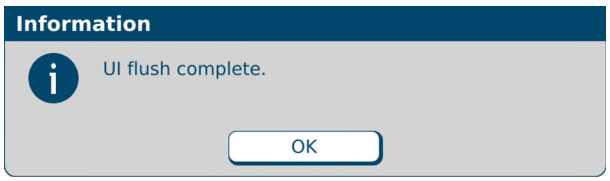
Message

6. Check that:
   - Each syringe has fluid and its plunger is not stuck.
   - The appropriate inlet is used with each source container.
   - The inlets have no obstructions, kinks, tangles or plugs. If necessary, replace the inlets. Refer to Changing the Tube Set on Page 40.
   - The occlusion detector is not damaged or dirty.
   - The outlet tube is straight and flat on the occlusion detector.
7. At the *Fluid path will be flushed with UI* message, tap **OK**.



Message

8. Check that the fluid moves properly during the flush.
9. At the *UI flush complete* message, tap **OK**.



Message

10. Remove the bag. Refer to Removing the Patient Bag on Page75.
11. Discard the bag.

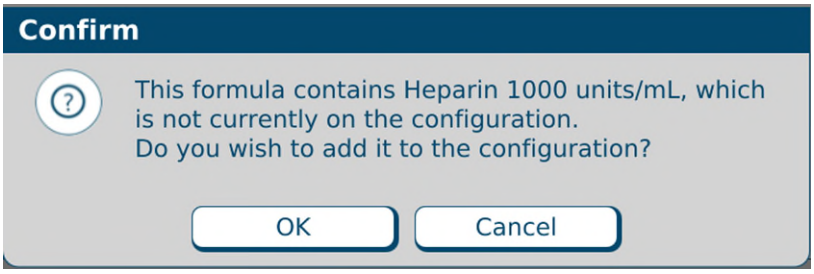
Performing an Auto-Addition

An auto-addition allows you to add an ingredient to the existing configuration temporarily, to fulfill the current order, instead of selecting a new configuration (which would require you to prime and verify all the inlets and ingredients).

Tip! Port selection should be in accordance with Baxter's Configuration Guidance on Page 138.

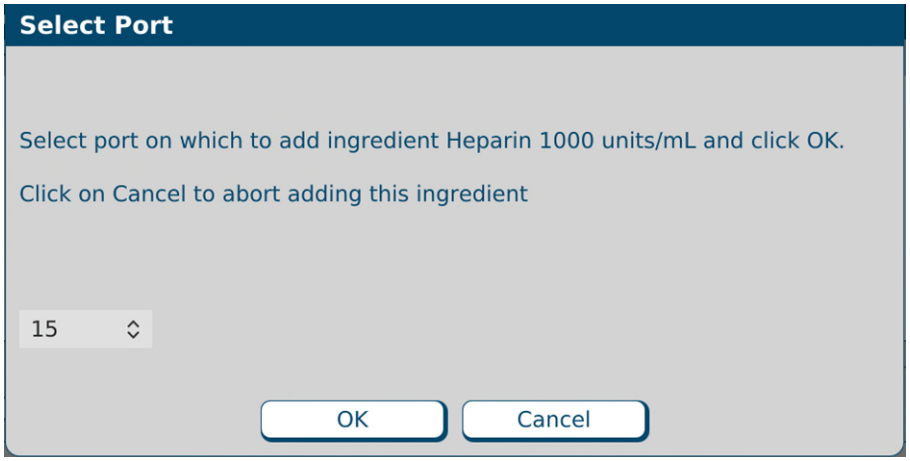
If the loaded formula includes an ingredient that is not attached to the compounder but is identified as an allowable auto-addition in the formulary and the current configuration, a *Confirm* message appears.

1. At the *Confirm* message, tap **OK**.



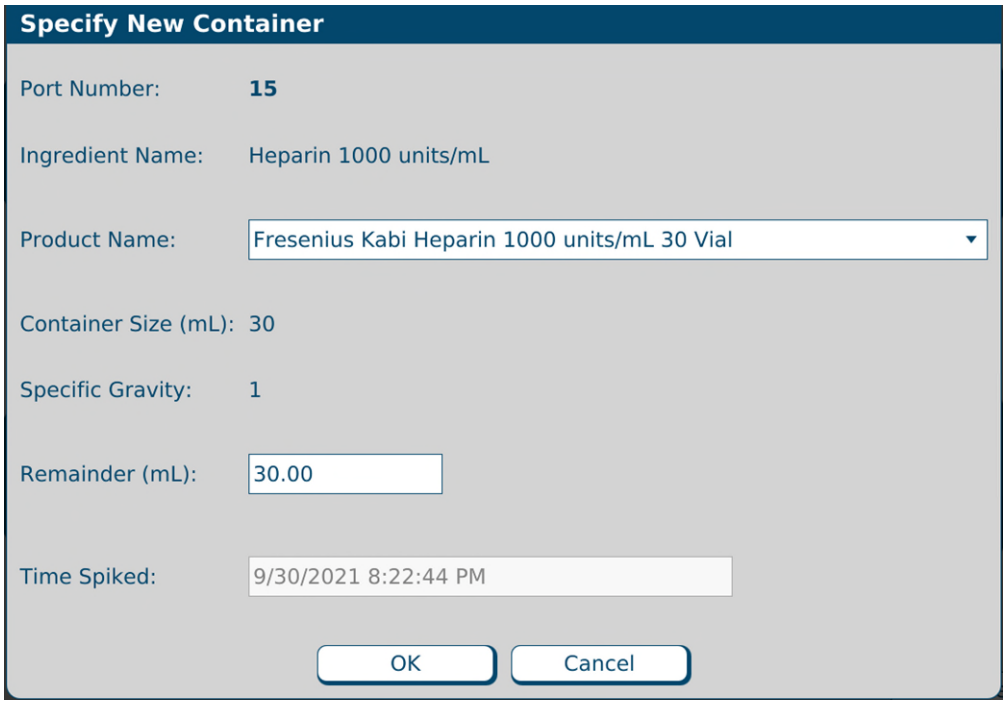
Message

2. At the *Select port* window:
   a. Select the port to which you will attach the ingredient.
   b. Tap **OK**.



Select port window

3. At the *Specify New Container* window:
   a. Select the **Product Name**.
   b. Tap **OK**.



Specify New Container window

4. Attach the new ingredient and inlet. Refer to Attaching the New Ingredients and Inlets on Page 45.
5. If you have already attached the patient bag, remove it. Refer to Removing the Patient Bag on Page 75.
6. Attach a calibration bag. Refer to Attaching the Calibration Bag on Page 68.
7. Prime and verify the new inlet and ingredient. Refer to Priming and Verifying on Page 54.
8. Remove the calibration bag. Refer to Removing the Calibration Bag on Page 69.
9. Attach the patient bag. Refer to Attaching the Patient Bag on Page 71.

   NOTE: You can reattach the original patient bag.

10. Continue with compounding the solution. Refer to Compounding the Solution on Page 72.

    NOTE: The formula is not unloaded from the pump screen.

Handling Other Interruptions and Errors

For more information about handling interruptions and errors, refer to Troubleshooting on Page 199.

REMOVING THE EXPIRED TUBE SET AND EXPIRED INGREDIENTS

CAUTION

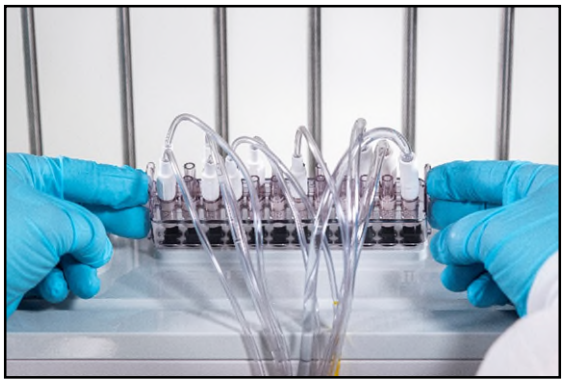
Do not remove the valve set until you have removed all source containers. This precaution helps to prevent a dropped source container from damaging the valve actuators.

WARNING

The only time the rotor should be rotated manually is under “Tube Set Will Be Changed” or when the compounder is powered OFF. Turning the rotor at any other time while the compounder is powered on will result in a fault state error message.

If an expired tube set and expired ingredients are already installed:

1. Attach a calibration bag. Refer to Attaching the Calibration Bag on Page 68.
2. Place a waste container in front of the hood and align in front of the compounder.
3. Remove one source container from the vial rack or hanger and turn the source container right side up.
4. Lower the source container below the height of the valve set between the load cell and the display. Bags can be lowered directly into the waste container.
5. Repeat the previous steps for each source container.
6. Press the tabs on the ends of the valve set, then lift to remove it.



Removing the valve set

NOTE: The appearance of the valve set may differ from the example shown above.

7. Turn the pump rotor counterclockwise while removing the outlet tube from the pump.
8. Remove the calibration bag.
   a. Remove the bag’s fill port from the load cell’s fill port holder.
   b. Remove the bag from the load cell.
9. Discard the valve set and the attached calibration bag into the waste container.
10. Discard the inlets, spikes and Ingredient source container(s) per the facility protocol.

Tip! Baxter recommends cleaning the compounder before installing a new valve set. Refer to Cleaning the Compounder on Page 92, and follow your facility’s protocol.

MAINTAINING THE COMPOUNDER

To keep the compounder in the best possible condition, perform these routine maintenance tasks daily:

- Calibrate the load cell
- Change the tube set
- Clean the compounder
- Calibrate the compounder
- Shut down and start up the compounder

And perform these tasks regularly:

- Back up and compact the database (Baxter recommends Weekly)
- Clean the rotor (Baxter recommends Monthly)

CALIBRATING THE LOAD CELL

This procedure is usually performed as part of the daily setup.
For instructions, refer to Calibrating the Load Cell on Page 35.

CHANGING THE TUBE SET

This procedure is usually performed as part of the daily setup.
For instructions, refer to Changing the Tube Set on Page 40.

CLEANING THE COMPOUNDER

Clean the compounder when indicated by your facility's protocol. Use only approved cleaning agents :

- Non-abrasive cloth
- Soap and water
- 70% Isopropyl alcohol or another self-drying disinfectant

The list of cleaning agents is subject to change. Please contact Baxter Technical Support to receive the most up to date list.

NOTE: Baxter does not recommend using VHP (vaporized hydrogen peroxide) to clean the compounder. Use of VHP may cause damage to internal components.

Tip! Baxter recommends cleaning the compounder daily or whenever you change the tube set, or whenever there is a spill.

CAUTION

Cleaning is required to ensure that the compounder operates as intended. Failure to clean the compounder can impair its operation.

Do not immerse the compounder in liquid or use sodium hypochlorite solutions (for example, Clorox®).

Disassembling the compounder beyond what is needed for cleaning as described in this procedure voids the manufacturer's warranty.

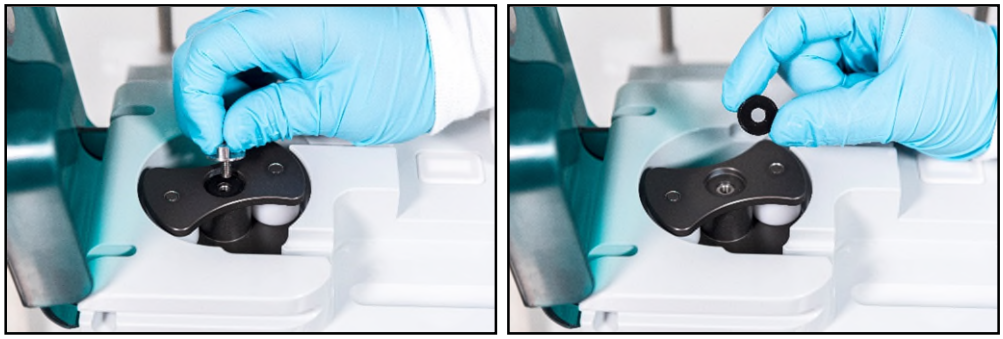
Power off the device during routine cleaning.

Using the support legs will reduce the possibility of pinching your hands when you connect/disconnect the cord and cables while cleaning.

To avoid pinching your fingers while cleaning, grasp the pump rotor from the top and rotate it counterclockwise, keeping your fingers away from other surfaces while moving the rotor.

1. Shut down and turn off the compounder. Refer to Rebooting and Shutting Down on Page 32.
2. If the tube set is installed, remove and discard it. Refer to Removing the Expired Tube Set and Expired Ingredients on Page 91.
3. Open the pump door.
4. Remove and retain the thumbscrew and washer used to attach the rotor.

   NOTE: The rotor should be cleaned at least monthly, or when there are visible signs of contaminants.

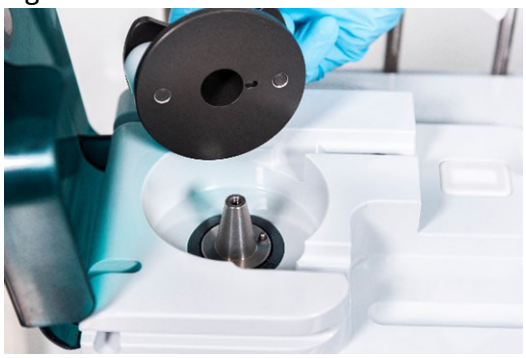


Removing the thumbscrew

5. Remove the pump rotor from the spindle.

Removing the pump rotor

6. Using the approved materials, clean the:
    - Pump rotor, making sure that the rollers spin freely. If rollers are not spinning freely, contact Baxter Technical Support.
    - Pump rotor area
    - Channels near the pump rotor area
7. Install the:
    - Pump rotor, aligning the notch on bottom of the rotor with the pin on the spindle



Aligning the notch and pin

    - Washer and thumbscrew
8. Close the pump door.
9. Using the approved materials, clean the:
    - Valve actuators
    - Surface of the main module
    - Load cell
    - Poles and holders on the vial rack

CALIBRATING THE COMPOUNDER

This procedure is usually performed as part of the daily setup. For instructions, refer to Calibrating the Compounder on Page 65.

SHUTTING DOWN AND STARTING UP THE COMPOUNDER

Tip! Baxter recommends fully shutting down and starting up the compounder once a day, to allow the software to perform routine database maintenance at startup.

For instructions, refer to Starting Up, Logging In and Out, and Shutting Down on Page 30.

BACKING UP AND COMPACTING THE DATABASE

The compounder's database accumulates data related to solutions, formulas and logs. For example, the software records important device activity in a Blackbox log, which Baxter can access through the Blackbox Report when needed. The compounder stores this data for a specified time period. To set up the storage options, refer to Storage on Page 103.

When you shut down the software, the compounder automatically backs up the database. If required during troubleshooting, you can use the backup data to restore the software settings

to an earlier state. When you start up the software, it notifies you if more than seven days have passed since the last backup occurred. In this situation, perform a manual backup.

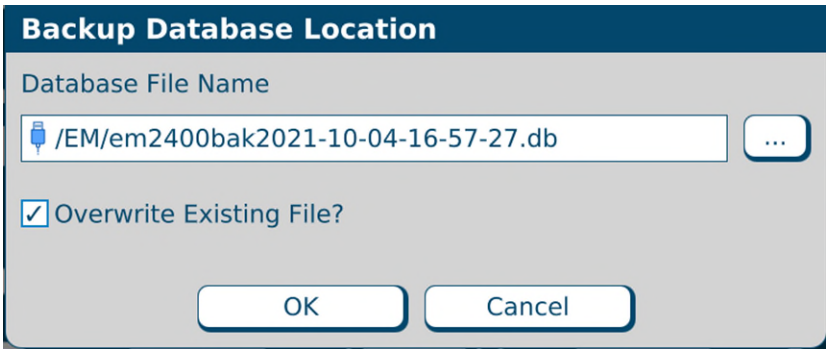
Tip! Baxter recommends performing a manual backup at least once a week or after changing the system settings.

You can also compact the database to reduce its space on the hard drive and keep the compounder operating efficiently. To set up the compaction options, refer to Database Compaction on Page 105.

Backing Up the Entire Database

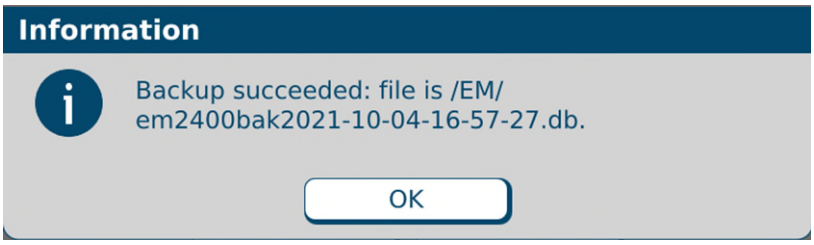
This procedure backs up the entire database, including the Blackbox log.

1. At the menu screen, tap **Tools > Database > Backup All**.
2. At the *Backup Database Location* window:
   a. If desired, change the location of the backup by tapping the button to the right of the current location (not recommended).
   b. If you want to:
      - Replace all the previous backup files to save space, select the **Overwrite Existing File?** check box.
      - Keep the previous backup files, clear the **Overwrite Existing File?** check box.
   c. Tap **OK**.



Backup Database Location window

3. At the *Backup succeeded* message, tap **OK**.

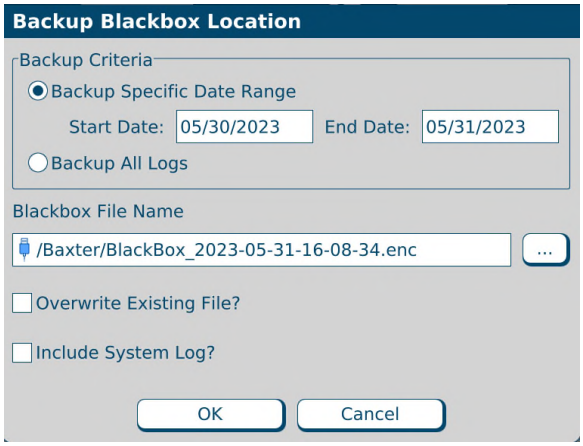


Message

Backing Up the Blackbox Log

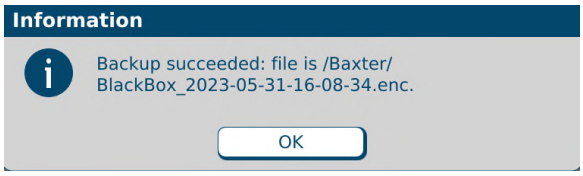
This procedure backs up only the Blackbox log.

1. At the menu screen, tap **Tools > Database > Backup Blackbox**.
2. At the *Backup Blackbox Location* window:
   a. If desired, change the location of the backup by tapping the button to the right of the current location (not recommended).
   b. If you want to:
      - Replace all the previous backup files to save space, select the **Overwrite Existing File?** check box.
      - Keep the previous backup files, clear the **Overwrite Existing File?** check box.
      - Download detailed operating system logs, select the **Include System Log?** check box.
   c. Tap **OK**.



Backup Blackbox Location window

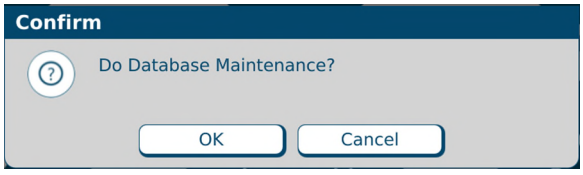
3. At the *Backup succeeded* message, tap **OK**.



Message

Compacting the Database

1. At the menu screen, tap **Tools > Database > Maintenance**.
2. At the *Do Database Maintenance?* message, tap **OK**.



Message

PERFORMING ADVANCED TASKS

Perform these tasks only when directed by Baxter Technical Support.

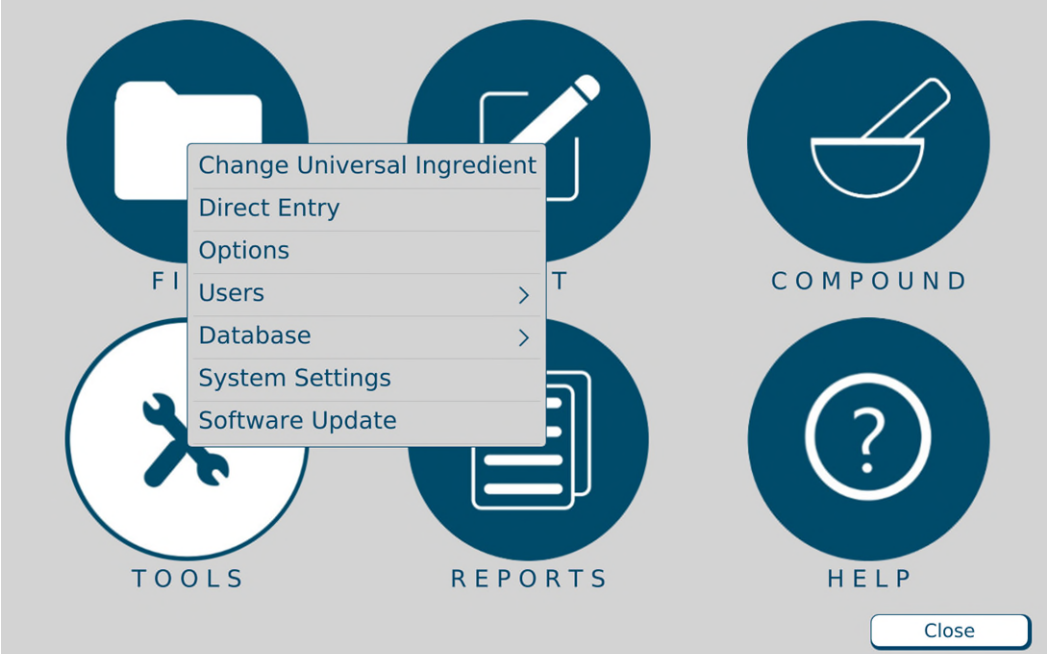
CHANGING THE UNIVERSAL INGREDIENT

IMPORTANT! This function requires Change Universal Ingredient permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

To change the Universal Ingredient for the most recently used configuration when you are not in the process of compounding a solution, do the following procedure. To change the volume used for flushing after a UI change, refer to Flush Between UI Changes on Page 106.

If you are prompted to change the volume of the UI during the compounding process, refer to Formula Conflict on Page 205.

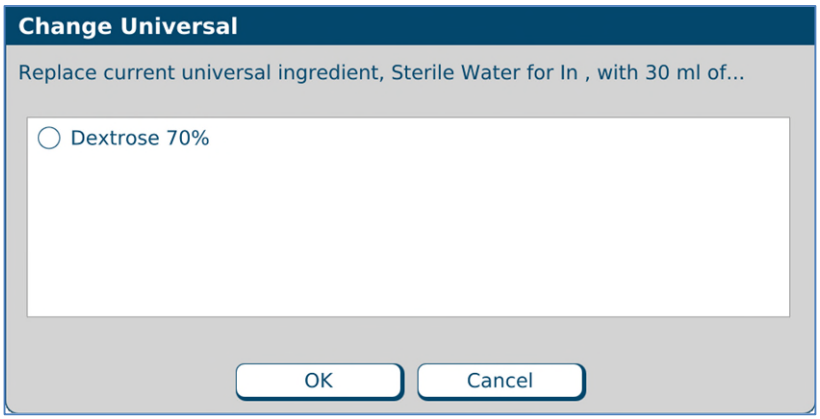
1. At the menu screen, tap **Tools > Change Universal Ingredient**.



Menu screen, Tools menu

A *Change Universal* window appears. It lists any ingredients that are available in the current configuration and have been specified as Universal Ingredients in the Formulary Editor. To specify the Universal Ingredients, refer to Using the Formulary Editor on Page 143.

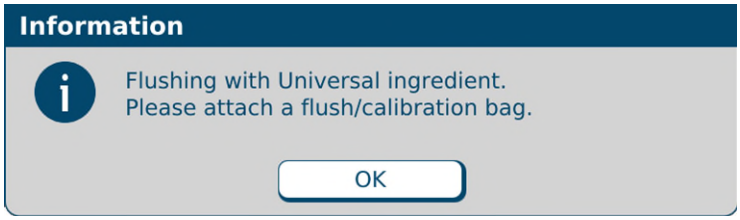
2. At the *Change Universal* window:
   a. Select the Universal Ingredient you want to use.
   b. Tap **OK**.



Change Universal window

The compounder requires a flush of the new Universal Ingredient to clear the old Universal Ingredient from the common fluid pathway.

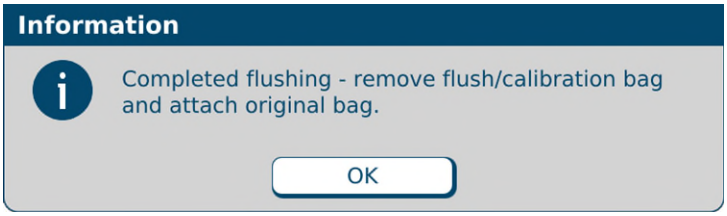
3. Attach a calibration bag. Refer to Attaching the Calibration Bag on Page 68.
4. At the *Flushing with Universal Ingredient* message, tap **OK**.



Message

The pump screen shows an animation of the flush.

5. When the *Completed flushing* message appears, remove the calibration bag. Refer to Removing the Calibration Bag on Page 69.
6. If you will continue with compounding a solution, attach a patient bag. Refer to Attaching the Patient Bag on Page 71.
7. At the *Completed flushing* message, tap **OK**.



Message

CHANGING THE INGREDIENT REMAINDERS

For each ingredient, the compounder tracks the volume that is used and the volume that remains in the source container (the remainder). If necessary, you can manually change each remainder shown in the software.

WARNING

The remainder value in the software must accurately represent the actual volume remaining in the source container. Change a remainder value only when you know the precise amount remaining in the source container. Incorrect remainder values can lead to bubbles, occlusions and under-delivery of an ingredient if its source container runs empty.

IMPORTANT! This function requires Compounder permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

1. At the menu screen, tap **Compound > Edit Source Remainders**.
2. At the *Edit Source Remainders* window:
   a. For the desired ingredient, change the **Remainder** to correspond to the volume remaining in the container.

      NOTE: You can tap **Reset** to change the remainder to its default value, or tap **Reset All** to change all the remainders to their default values at the same time.

      Tip! Baxter does not recommend using **Reset All** unless the entire list of ingredients has been changed.

   b. Tap **OK**.

Edit Source Remainders window

SETTING UP THE OPTIONS

IMPORTANT! These functions require Administration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

NOTE: At any tab of the *Options* window:

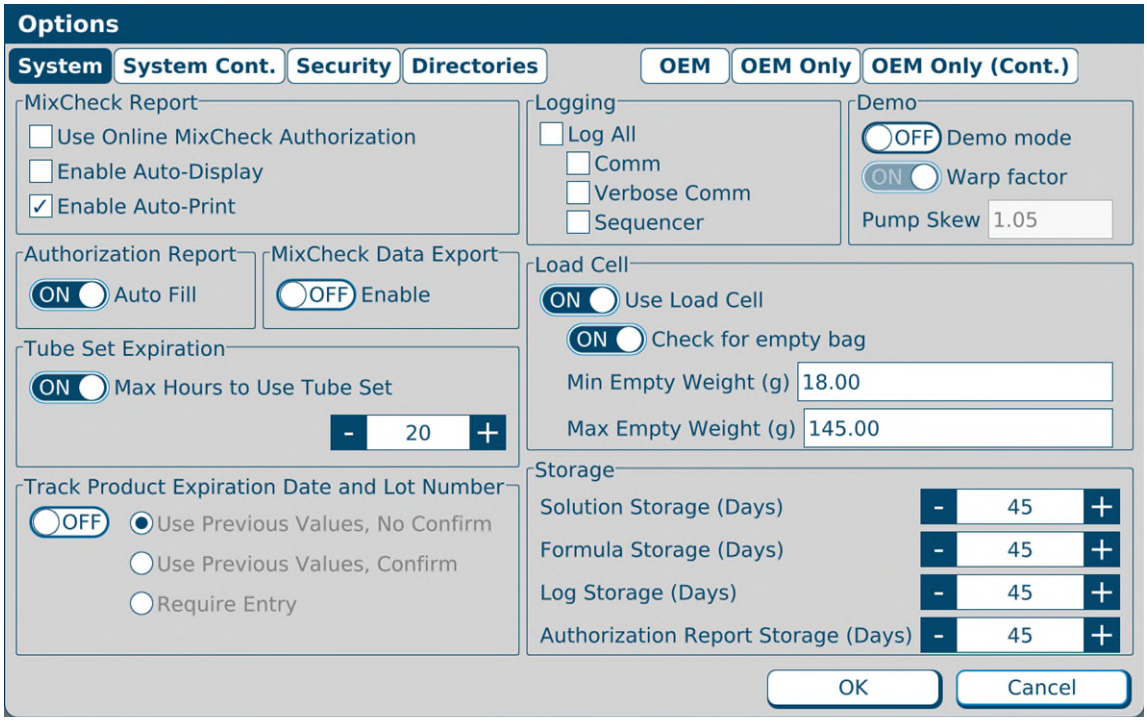
- Tapping **OK** saves the changes made on all the tabs and requires you to exit the software.
- Tapping **Cancel** closes the window without saving any changes.

SETTING UP THE SYSTEM OPTIONS

Use the **System** tab to set up the general system options.

To access the system options, tap **Tools > Options** at the menu screen.

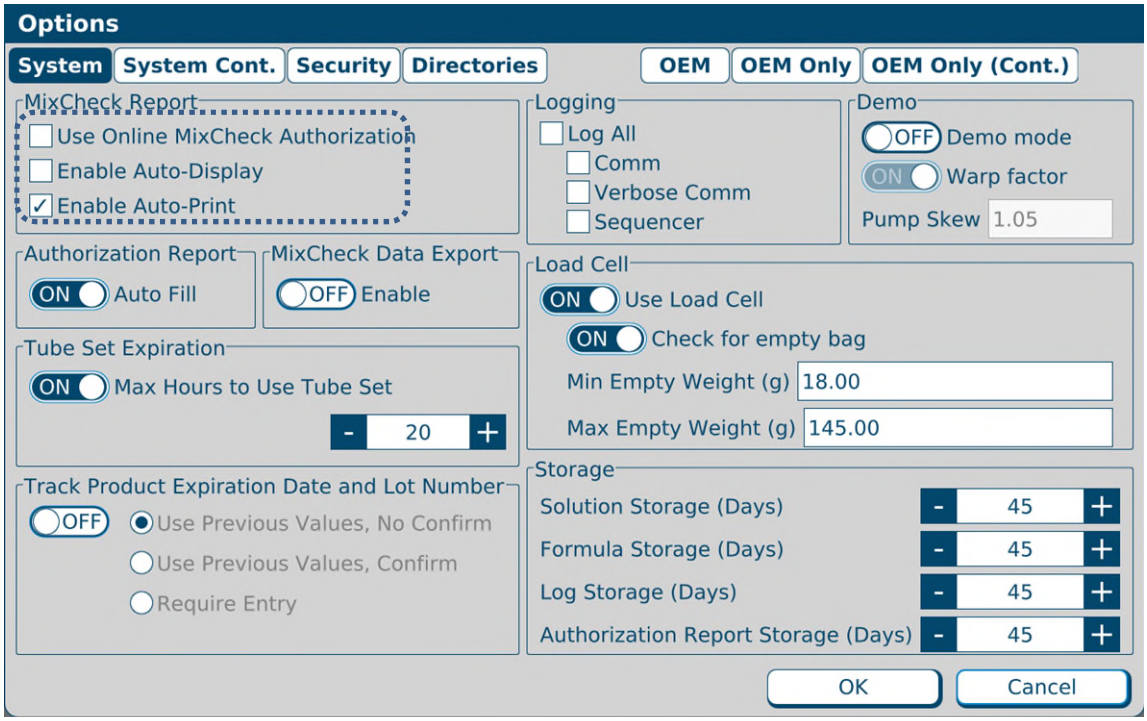
At the *Options* window, the **System** tab is selected.



*Options window, **System** tab*

MixCheck Report

The MixCheck Report is available after compounding is finished. For more information about the contents of this report refer to MixCheck Report on Page 167.



*Options window, **System** tab*

Enable Auto-Print is enabled by default. Ensure one or both of the options **Enable Auto-Display** and **Enable Auto-Print** are selected; otherwise, an error message results. **Use Online MixCheck Authorization** is optional.

- Select **Use Online MixCheck Authorization** if you want to require a qualified user to log in with a password to approve each MixCheck Report on the screen. For details, refer to Using Online MixCheck Authorization on Page 167.
- Select **Enable Auto-Display** if you want the MixCheck Report to appear automatically on the display after compounding is finished.
- Select **Enable Auto-Print** if you want the MixCheck Report to print automatically after compounding is finished.

Authorization Report

The Authorization Report is available after the Setup Wizard is finished, or from the **Reports** menu. For more information about the contents of this report, refer to Authorization Report on Page 172.

Select **Auto Fill** if you want to make the **Assembled** and **Verified** columns of the report populate automatically with the name of the person who logged in to perform the task.

Load Cell

IMPORTANT! Baxter does not recommend changing these settings. Before changing any of these settings, contact Baxter Technical Support. Refer to Getting Help on Page 20.

Select **Use load cell** if you want to use the compounder's scale. This box should always be selected, except if the load cell is not functional and an external scale is available. If you select this check box, the following options become available.

Select **Check for empty bag** if you want to make the load cell check for the absence of a bag or the presence of a non-empty bag. If you select this check box, numbers appear in both of these fields:

- For **Min Empty Weight**, enter the minimum expected weight of an empty bag. If the load cell measures a weight less than this number at the start of compounding, a warning message indicates that a bag may not be attached to the load cell.
- For **Max Empty Weight**, enter the maximum expected weight of an empty bag. If the load cell measures a weight greater than this number at the start of compounding, a warning message indicates that the bag on the load cell may not be empty.

Tip! Baxter recommends selecting **Check for empty bag**.

Track Product Expiration Date and Lot Number

Select **Enabled** if you want to track the expiration date and lot number for every source container that is attached to the compounder. If you select this check box, these options become available:

- Select **Use Previous Values, No Confirm** if you want the compounder to use the previous date and lot number without requiring confirmation.
- Select **Use Previous Values, Confirm** if you want the compounder to use the previous date and lot number but require confirmation.
- Select **Require Entry** if you want the user to enter values each time a new container is attached.

Logging

Regardless of the **Logging** settings, the compounder stores records in a Blackbox log. For information about viewing the contents of this log, refer to Blackbox Report on Page 186.

In most cases, it is not necessary to change the **Logging** settings. Selecting any of these check boxes may cause the log to grow to a size that slows the performance of the software.

Demo

Demo mode uses a “virtual compounder” to simulate the compounder’s operation. It can be used during training.

Select **Demo mode** if you want to enable demo mode. If you select this check box, these options become available:

- Select **Warp factor** if you want to make the virtual compounder perform compounding operations faster than normal.
- For **Pump Skew**, enter a number. Entering a number other than **1.05** forces the virtual compounder to pump inaccurately, for training purposes.

NOTE: Operating in demo mode affects the ingredient remainders.

Tip! Do not use demo mode with ingredients attached.

Storage

The storage fields set the number of days that the database stores solution, formula and log (Blackbox) information. Information older than the specified storage period is purged when the software starts up.

You can increase or decrease these settings:

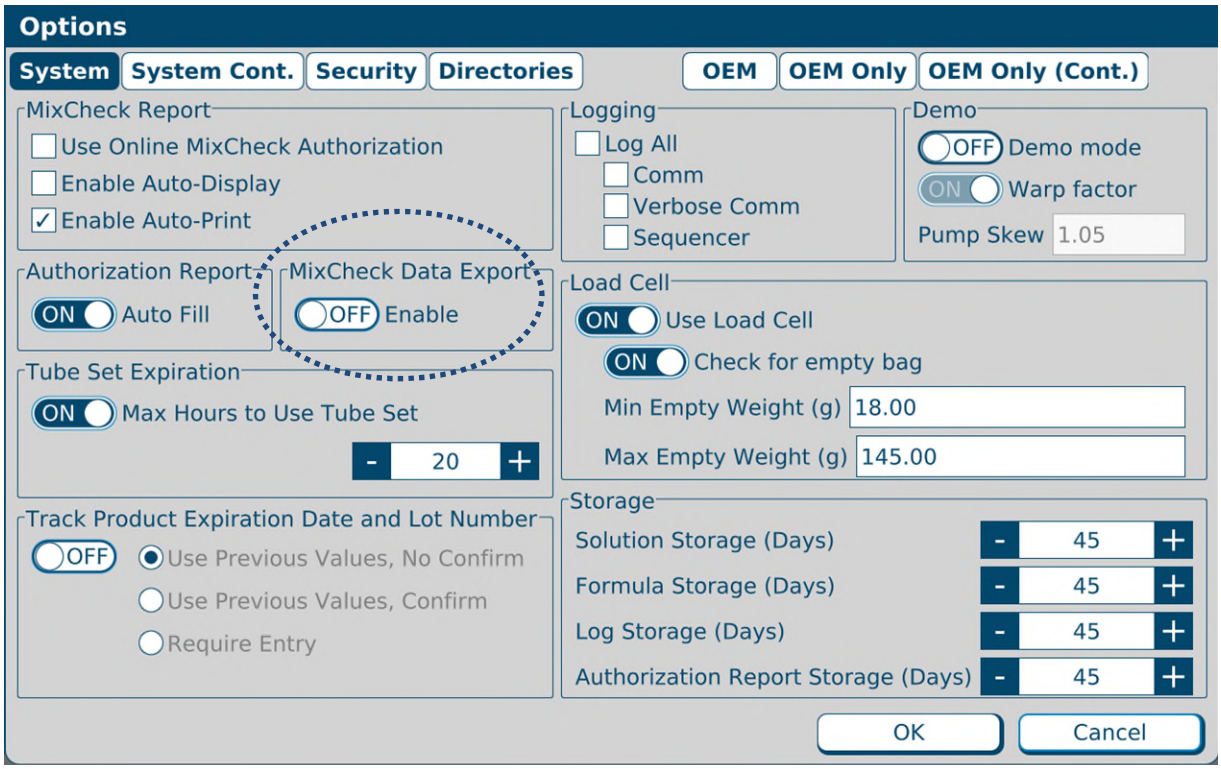
- For **Solution Storage (Days)**, enter the number of days that used formulas are available in the database.
- For **Formula Storage (Days)**, enter the number of days that unused formulas are available in the database.
- For **Log Storage (Days)**, enter the number of days that Blackbox information is available in the database.
- For **Authorization Report Storage (Days)**, enter the number of days that authorization data is available in the database.

The minimum duration available for the above-mentioned storages are 30 days and maximum are 450 days. By default, all the above storage days are set to 45 days.

MixCheck Data Export

Select **Enable** if you want the compounder to export data directly to the Baxter DoseEdge® Pharmacy Workflow Manager.

For this feature, the DoseEdge system must be specified as the printer. For assistance with setting up printers, contact Baxter Technical Support. Refer to Getting Help on Page 20.



*Options window, **System** tab*

Tube Set Expiration

IMPORTANT! Before changing any of these settings, contact Baxter Technical Support. Refer to Getting Help on Page 20.

Select **Enable** if you want the compounder to display a message when the tube set has been used longer than recommended.

For **Max Hours to Use Tube Set**, enter the maximum number of hours that the tube set should be used.

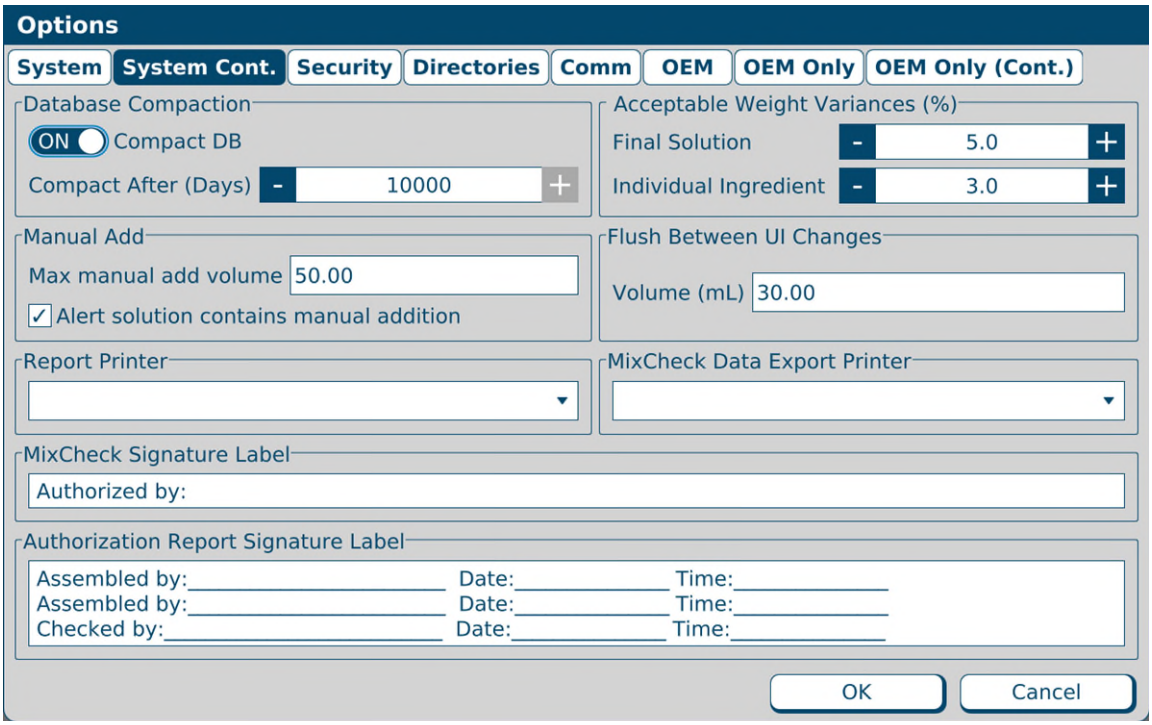
Tip! Baxter recommends entering 20 for the **Max Hours to Use Tube Set**, so that the tube set expires shortly before (instead of shortly after) the previous daily setup.

SETTING UP THE SYSTEM (CONTINUED) OPTIONS

The **System Cont.** tab is a continuation of the **System** tab.

To access the continued system options:

1. At the menu screen, tap **Tools > Options.**
2. At the *Options* window, tap the **System Cont.** tab.



Options window, ***System Cont.*** *tab*

Database Compaction

IMPORTANT! Do not change these settings unless directed by Baxter Technical Support.

Select **Compact DB** if you want to make the compounder compact the database at startup.

Acceptable Weight Variances (%)

For **Final Solution**, enter the maximum acceptable difference between the expected and actual weight of the compounded solution. If any compounded solution has a weight outside this range, an alarm beeps and a message displays the results in red. The results also appear on the MixCheck Report.

For **Individual Ingredient**, enter the maximum acceptable difference between the expected and actual weight of each delivered ingredient. If any delivered ingredient has a weight outside this range, a message appears. The compounder weighs only ingredient deliveries of 100 mL or more.

Tip! Baxter recommends entering 5% for the **Final Solution** and 5% for the **Individual Ingredient**.

Manual Add

For **Max manual add volume**, enter the maximum volume allowed for a manual addition. If the volume of the formula ingredient exceeds this amount, a message appears, with options to add the ingredient manually or cancel compounding.

Flush Between UI Changes

For **Volume (mL)**, enter the final flush volume used to clear the common fluid pathway after changing the Universal Ingredient.

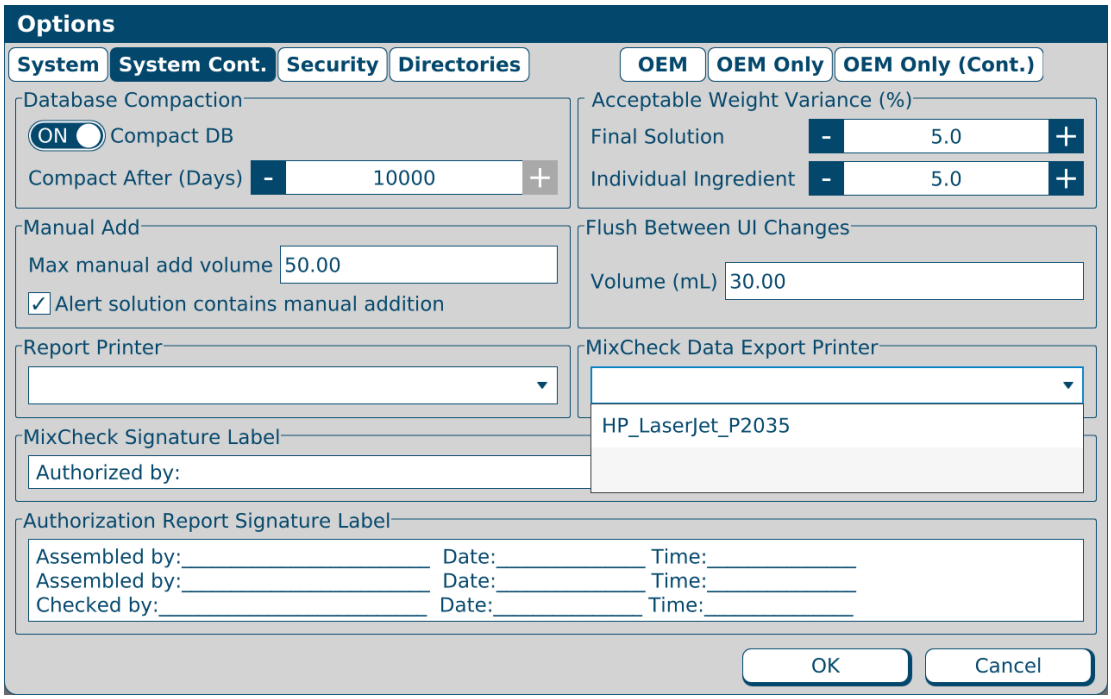
NOTE: A UI flush contains three deliveries with standard volumes of 50, 50 and 30 mL. Changing the **Volume** setting changes only the last of the three deliveries.

Report Printer

Select the printer used for printing reports.

MixCheck Data Export Printer

Select the printer used when sending MixCheck data to the DoseEdge system. If **MixCheck Data Export** option (System tab) is enabled, the application will display **MixCheck Data Export Printer** in the System Cont. tab.



Options window, ***System Cont.*** *tab*

MixCheck Signature Label

Enter text that you want to include at the bottom of the MixCheck Report.

Authorization Report Signature Label

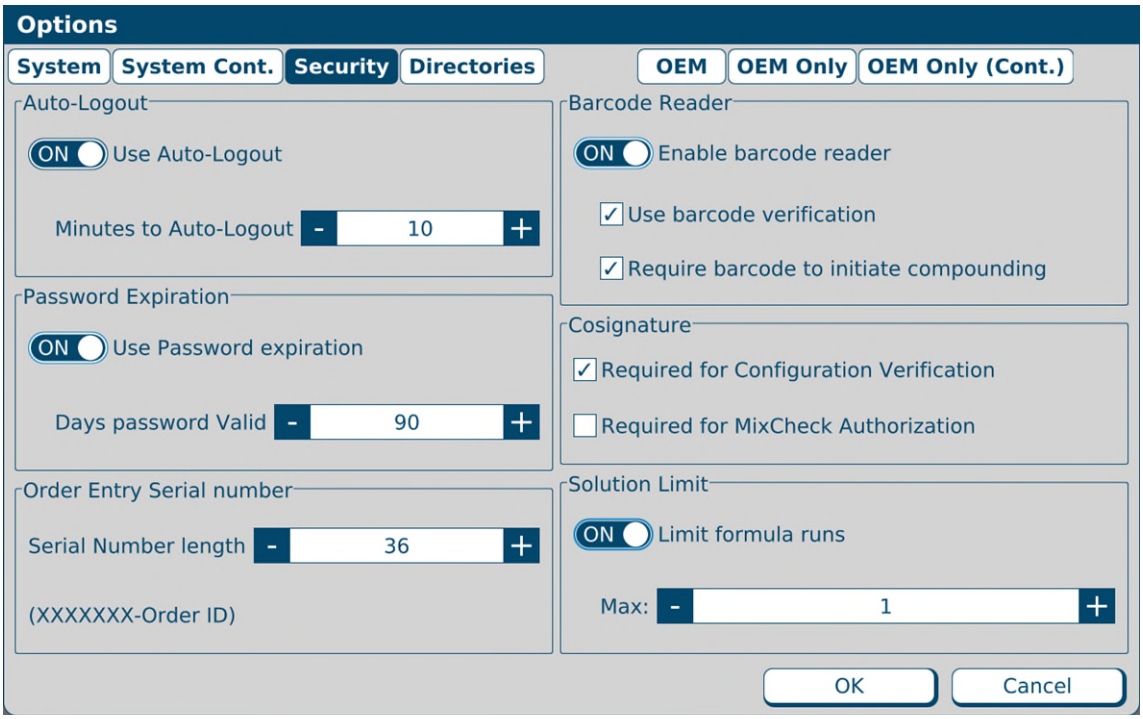
Enter text that you want to include about required signatures in the Authorization Report.

SETTING UP THE SECURITY OPTIONS

Use the **Security** tab to set the security features according to your facility's protocol.

To access the security options:

1. At the menu screen, tap **Tools > Options.**
2. At the *Options* window, tap the **Security** tab.



*Options window, **Security** tab*

Auto-Logout

Select **Use Auto-Logout** if you want the current user to be logged out automatically after a period of inactivity.

For **Minutes to Auto-Logout**, enter the number of minutes after which the user is logged out.

Tip! Baxter recommends entering 10–15 for the **Minutes to Auto-Logout**.

Password Expiration

Select **Use password expiration** to place an expiration date on each password, if your facility's protocol requires that user passwords must be changed on a regular basis.

NOTE: By default, the **Use password expiration** checkbox is checked.

For **Days password valid**, enter the number of days after which the password expires.

Tip! Baxter recommends entering 90 (or the number specified by your facility's protocol) for the **Days password valid**.

Order Entry Serial Number

For **Serial number length**, enter the maximum number of characters allowed in the serial number for a formula file.

NOTE: If the Order Entry Serial Number is more than 36 characters, part of it may be truncated in the reports.

Barcode scanner

Select **Enable barcode reader** to allow the use of a barcode scanner for scanning labels during verification of the setup and for loading formulas. If you select this check box, these options become available:

- Select **Use barcode verification** if you want to require the use of a barcode scanner for scanning labels during verification of the setup.
- Select **Require barcode to initiate compounding** if you want to require the use of a barcode scanner for loading formulas. If this box is selected, the user cannot manually select a saved formula.

WARNING

It is important to use a barcode scanner for scanning labels during verification of the setup and for loading formulas.

NOTE: Compounder supports both 1D and 2D GS1 barcode formats.

Cosignature

Select **Required for Configuration Verification** if you want to require a second user to log in and verify the configuration. If this option is not selected, the same user can set up and verify the configuration.

Tip! Baxter strongly recommends requiring a co-signature.

Select **Required for MixCheck Authorization** if you want to require a second user to log in and verify the MixCheck Report on the screen after compounding.

Solution Limit

Select **Limit formula runs** if you want to limit the number of times a specific formula can be used for compounding.

For **Max**, enter the maximum of times an individual formula can be used.

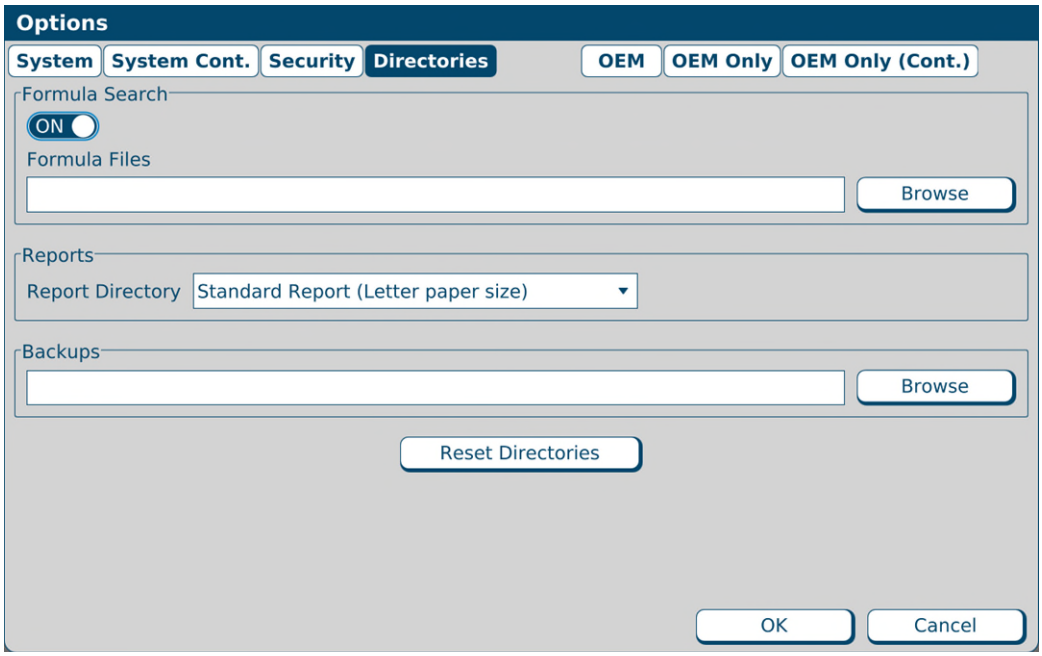
Tip! Baxter recommends entering 1 for the **Max**.

SETTING UP THE DIRECTORIES OPTIONS

Use the **Directories** tab to set the locations of formula files and backups.

To access the directories options:

1. At the menu screen, tap **Tools > Options.**
2. At the *Options* window, tap the **Directories** tab.



*Options window, **Directories** tab*

3. If you want to allow users to retrieve formula files, select **Formula Search**.

   IMPORTANT! After initial installation, you should not need to change the locations of the directories. Do not tap **Reset Directories** unless directed by Baxter Technical Support. This button changes the locations of the directories from their current settings.

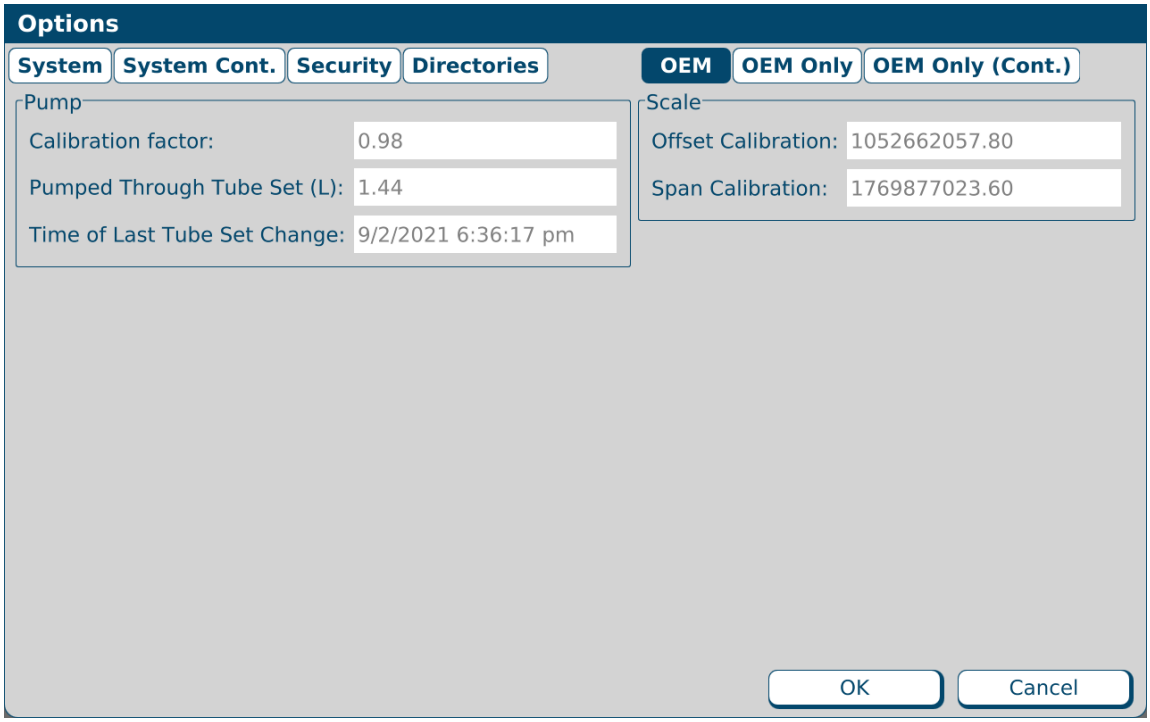
4. If you want to change the locations of the directories:
   a. Tap **Browse** for **Formula Files** or **Backups**.
   b. Select the location of the directory.

VIEWING THE OEM OPTIONS

You cannot edit the information on this tab; however, you may need to view it if directed by Baxter Technical Support.

To access the OEM options:

1. At the menu screen, tap **Tools > Options.**
2. At the *Options* window, tap the **OEM** tab.



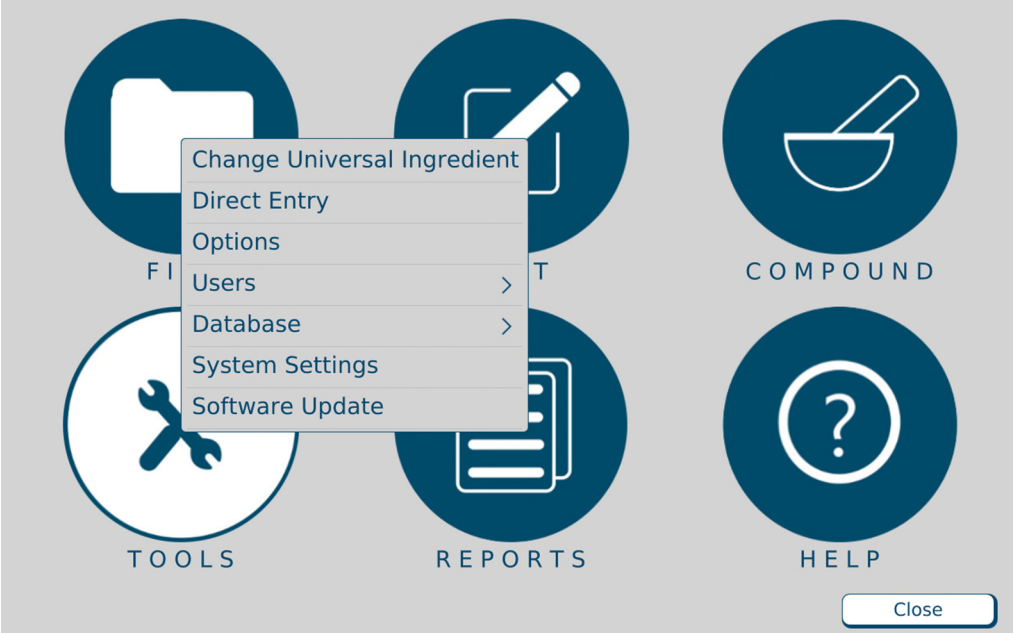
Options window, ***OEM*** *tab*

SYSTEM SETTINGS

IMPORTANT! Access to these functions requires Administration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

To access system settings

1. At the main menu, tap **Tools** > **System Settings**
2. In the left window pane, select a setting option of choice and the right window pane will display the corresponding information and editable options.



Tools options, Menu screen

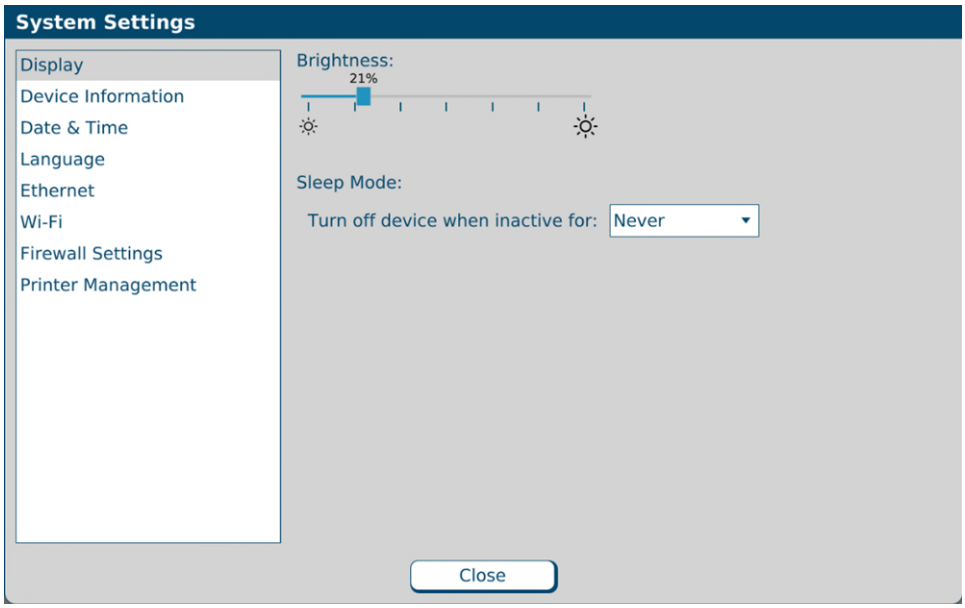
DISPLAY

Brightness:

The brightness of the display can be dimmed or brightened by adjusting the slider left or right between 0% and 100%.

Sleep Mode:

Sleep mode can be used to turn off the device after a period of inactivity. To adjust the inactivity period, tap the drop-down menu arrow and select a desired time or **Never** if you do not want the display to turn off due to inactivity.



Display screen, System Settings

DEVICE INFORMATION

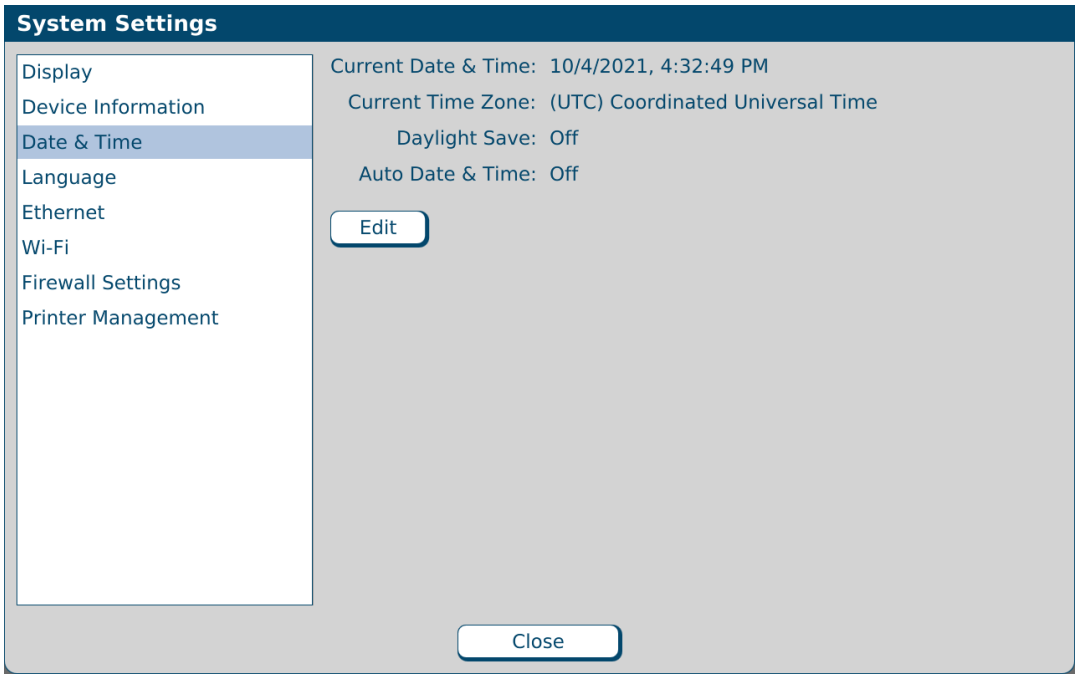
Device information provides information about the **ExactaMix Pro** display that can be helpful during service.

Device Information screen

DATE & TIME

IMPORTANT! These functions require System Settings permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

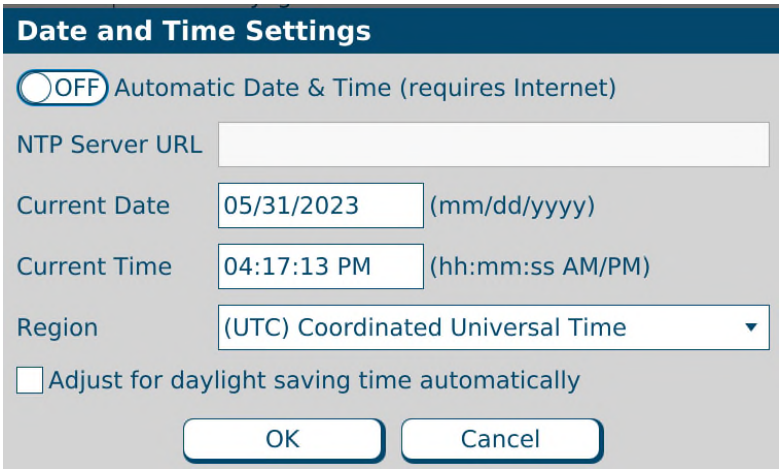
To change the date and time, select the **Edit** button on the *System Settings* screen. From this screen you can set time and date manually by entering the desired time or date in the fields, or use automatic time settings.



Date & Time screen

Turning on automatic date and time

1. Connect the **ExactaMix Pro** display to an internet source.
2. Tap the toggle button so that it reads ON.
3. Enter an NTP Server URL into the box next to NPT Server URL.
4. Tap **OK**.



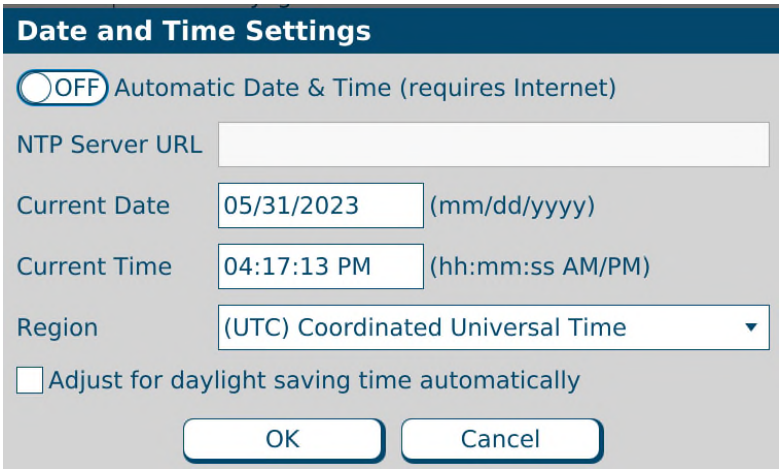
Date and Time Settings screen

Changing region

1. Tap the drop-down arrow in the box next to Region.
2. Select the desired region from the list.
3. Tap **OK**.

Turning on daylight savings time

4. After setting the time, check the box next to Adjust for daylight saving if the compounder is located in a region where Daylight Savings Time is observed.
5. Tap **OK**.



Date and Time Settings screen

LANGUAGE

IMPORTANT! Access to these functions requires System Settings permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

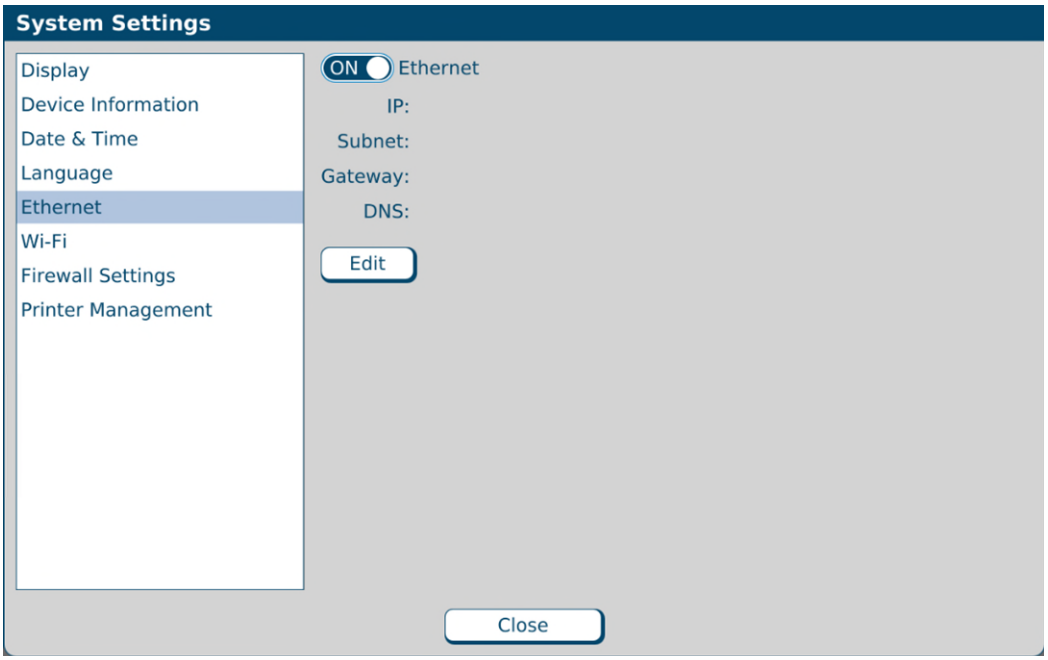
To view/edit language settings, click the **Language** tab on the *System Settings* screen.

Language screen

ETHERNET

IMPORTANT! Access to these functions requires Network Configuration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125,

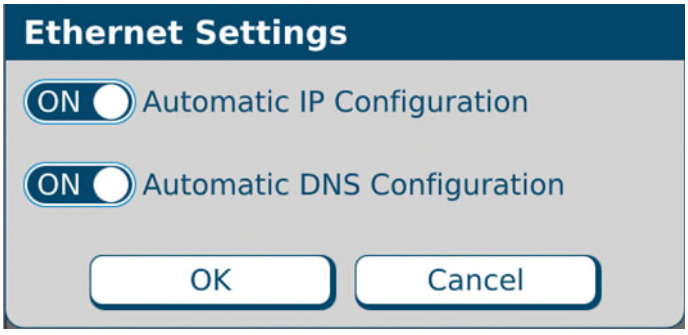
To view/edit ethernet settings, click the **Ethernet** tab on the *System Settings* screen.



Ethernet screen

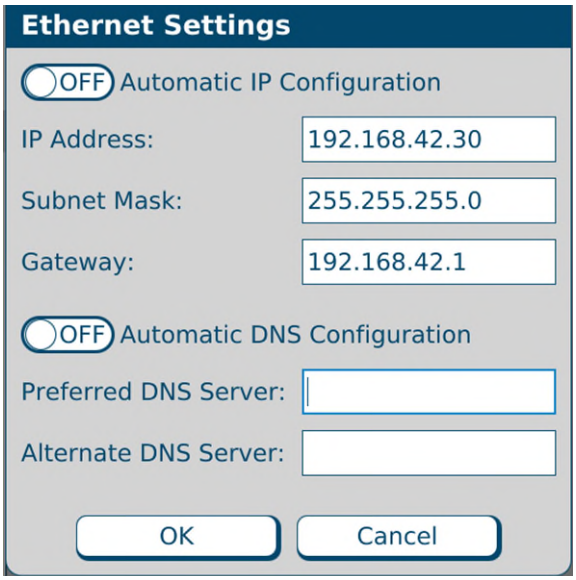
To edit the Ethernet settings:

1. Press the “Edit” button on the Ethernet screen. The following pop up will display.



Ethernet Settings Screen

2. By default, the IP and DNS configuration details are set to be automatic, and the system will automatically detect this information. They can be turned off to add the configuration details manually.



Ethernet Settings Screen, Manual Configuration

3. Click “OK” to save the Ethernet Settings.

WI-FI

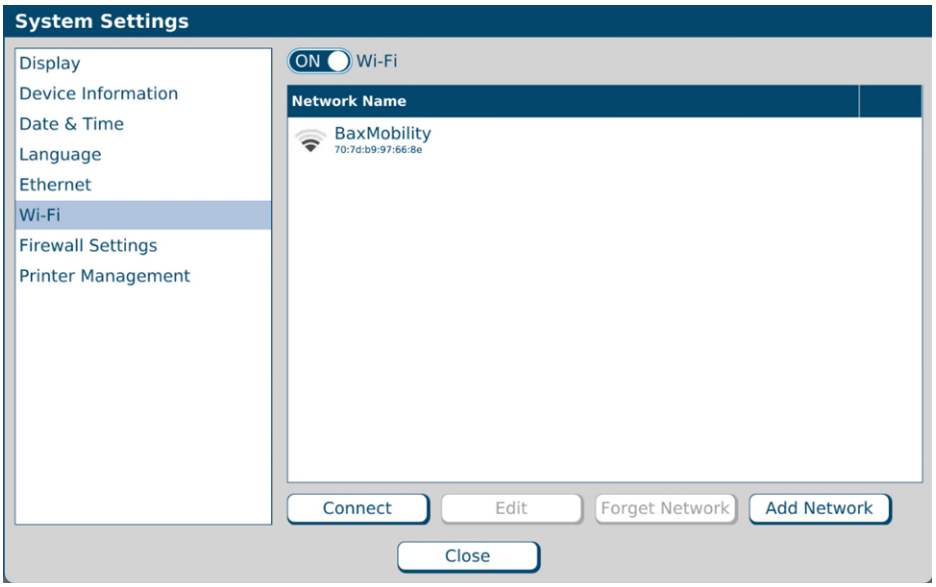
IMPORTANT! Access to these functions requires Network Configuration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

The **ExactaMix Pro** Compounder may be securely connected to wireless (Wi-Fi) networks using any of the security protocols listed below, in the order of lower security to higher security:

- WEP (Wired Equivalent Privacy) – This is the least secure method and requires the user to enter WEP keys. **ExactaMix Pro** Compounder supports both shared and open authentication mechanisms with key sizes of 40 bits and 104 bits.
- WPA2/WPA-PSK – This provides better security than WEP and requires the user to enter a pre-shared key as a passphrase. It uses a passphrase to authenticate and generate the initial data encryption keys. Then it dynamically varies the encryption key.
- WPA2/WPA-Enterprise with 802.1x authentication – This is the most secure protocol, supporting authentication and encrypted communication with the best cipher suites. Extensible Authentication Protocols (EAP) are supported, such as EAP-TLS and EAP-TTLS, EAP-FAST, EAP-TTLS/PAP and EAP-TTLS/MSCHAPv2. This protocol requires the user to enter a Wi-Fi client certificate and private key.

Tip! Baxter recommends using higher security protocols, such as WPA2/WPA-Enterprise, where the facility's network infrastructure supports it.

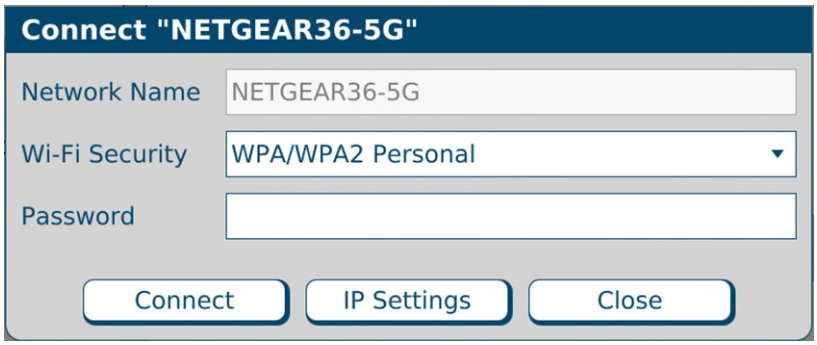
To view/edit wi-fi settings click the **Wi-Fi** tab on the *System Settings* screen. Select the desired available network and connect to it.



Wi-Fi Screen

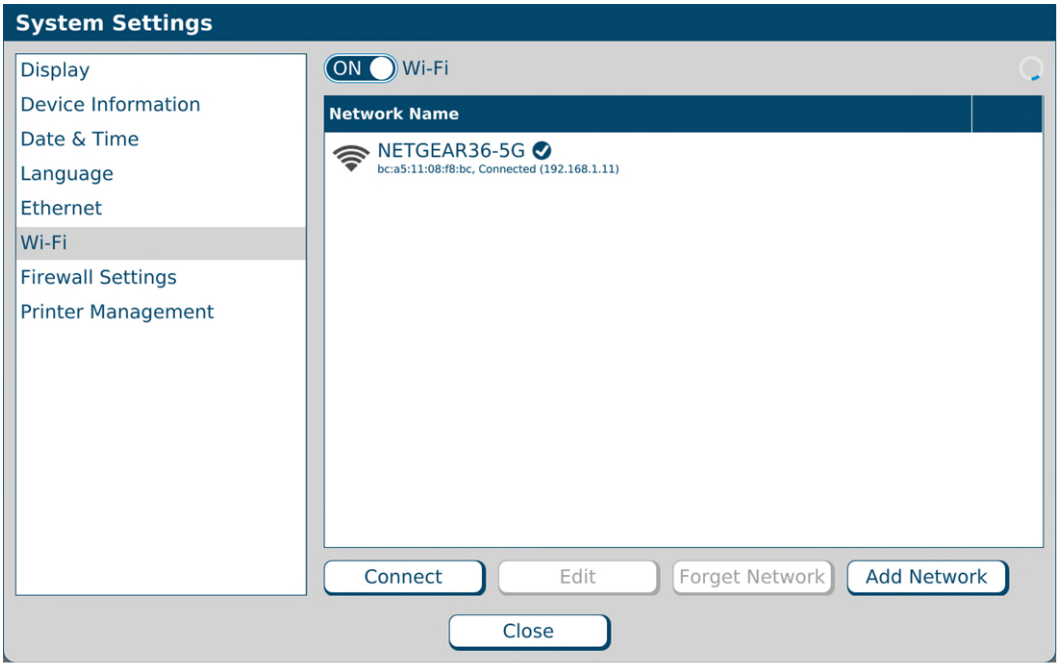
To connect to a wireless network,

1. Select the network that you wish to connect to and select **Connect**. The following pop-up will appear:



Wi-Fi Password Screen using WPA/WPA2 PSK protocol

2. Enter the password for the selected network and click **Connect**.

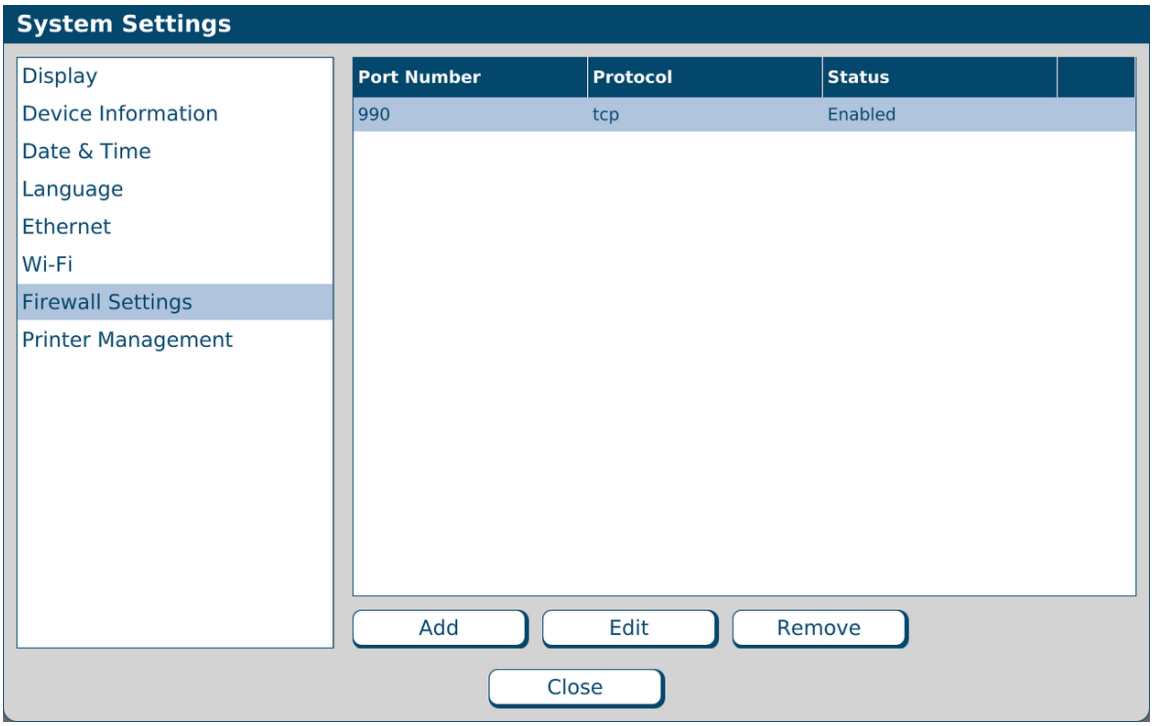


Wi-Fi Screen, Wireless network connected

FIREWALL SETTINGS

IMPORTANT! Access to these functions requires Network Configuration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

To view/edit firewall settings click the **Firewall Settings** tab on the *System Settings* screen.

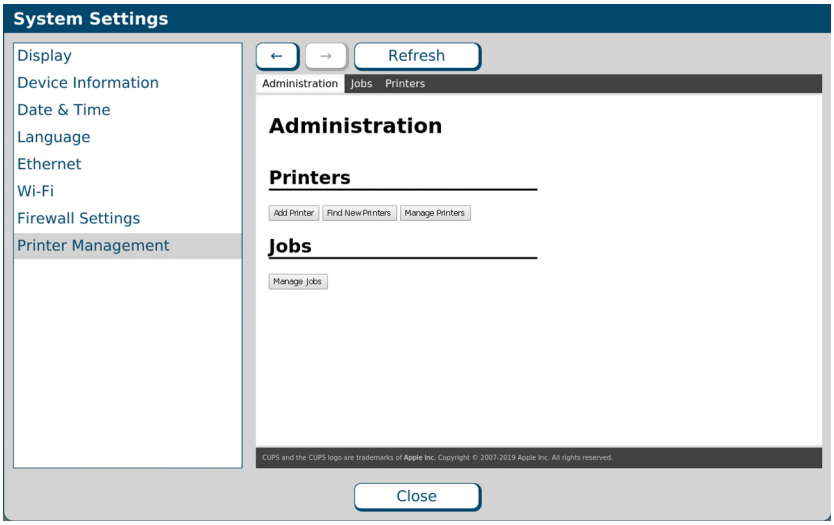


Firewall Settings screen

PRINTER MANAGEMENT

IMPORTANT! Access to these functions requires Network Configuration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

To view/add/edit printer settings click the **Printer Management** tab on the *System Settings* screen.

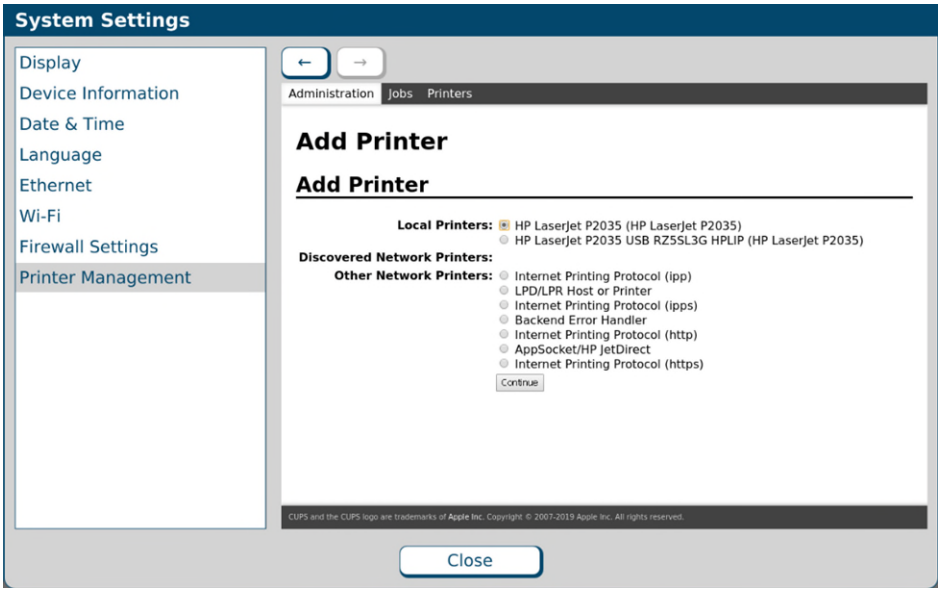


Printer Management Screen

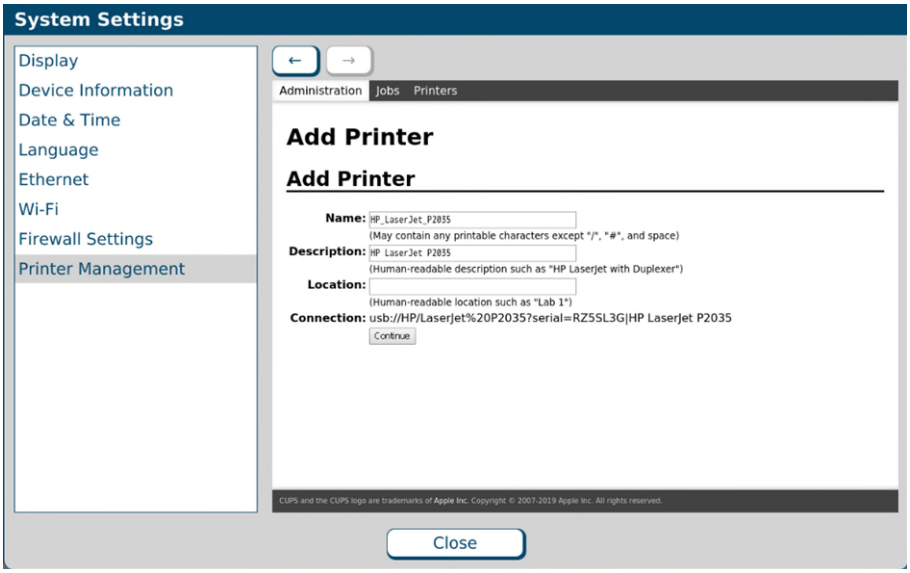
To add a printer:

1. To add a printer, tap the **Add Printer** button under the "Administration" tab of the Printer Management screen.

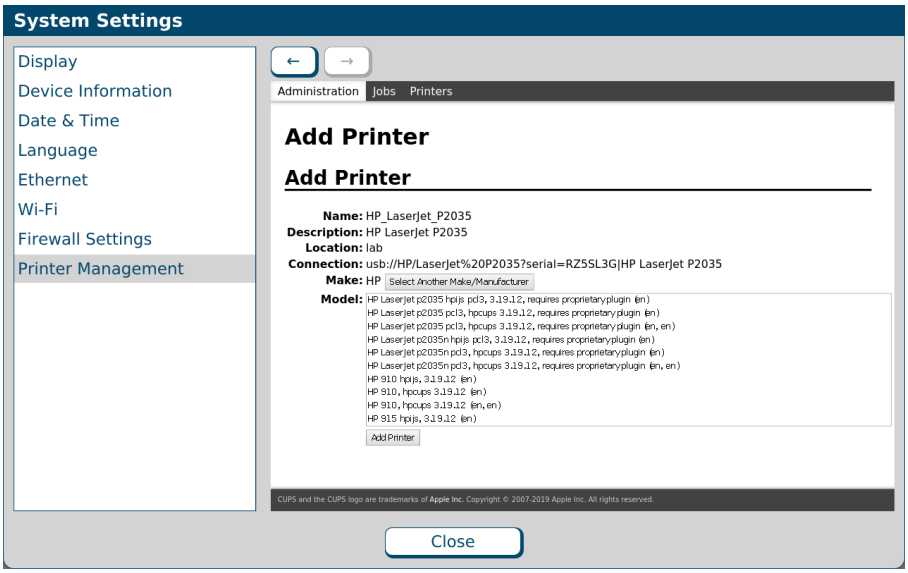
2. Select a printer from the list of Local Printers or the Network Printers and click "Continue". The following printer details screen will appear.



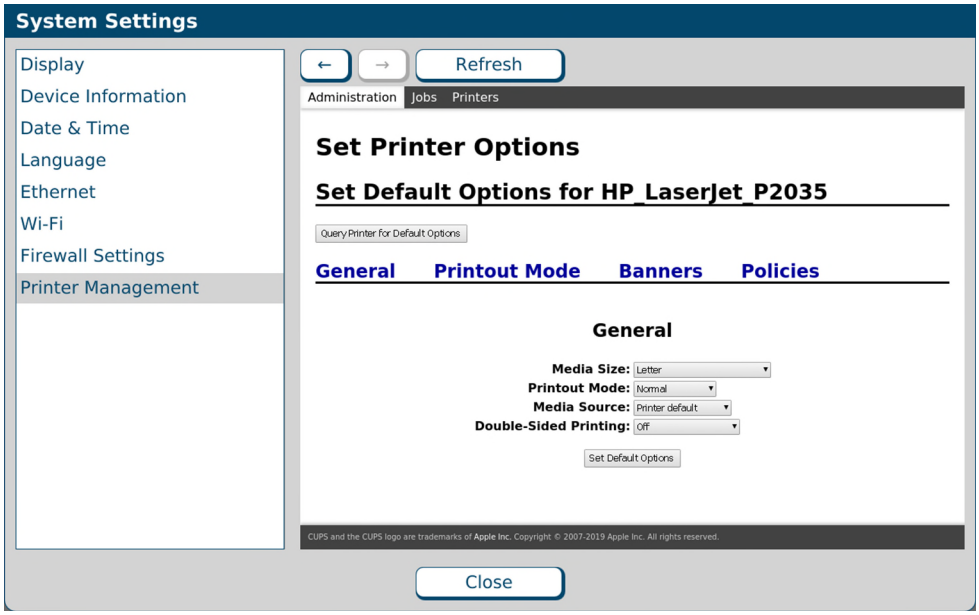
3. Confirm the printer details and add a location (optional) of the printer for convenience and tap “Continue”. The following printer model selection window will appear.



4. Select the Printer Model from the list and click “Add Printer”.



5. Set Printer Options screen will appear. You can customize the Media Size, Printout Mode, Media Source and Double Sided Printing by selecting from the respective dropdowns. Or you can accept the default settings by clicking the “Set Default Options” button.



Set Printer Options Screen

NOTE: Printer jobs can be resent in the Printer Management menu if there is any interruption when printing.

SETTING UP THE USERS

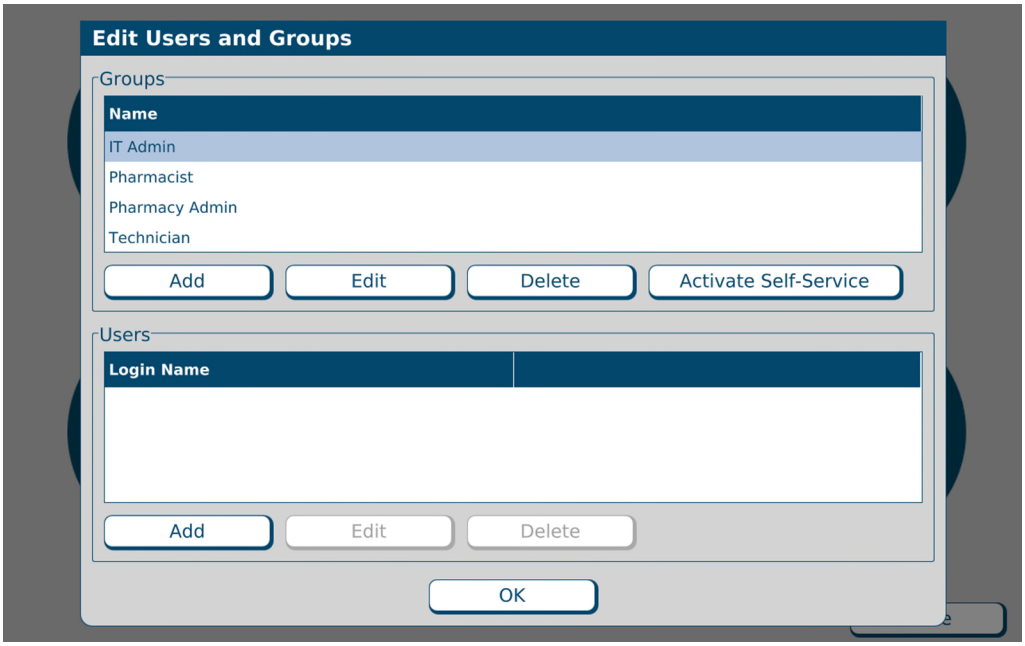
Each user must have an account so that the compounder can track activity. Users are assigned to groups that have the appropriate permissions to perform the required tasks.

WORKING WITH GROUPS

Adding or Editing a Group

IMPORTANT! These functions require Administration permissions.

1. At the menu screen, tap **Tools > Users > Edit Users and Groups**.



Edit Users and Groups window

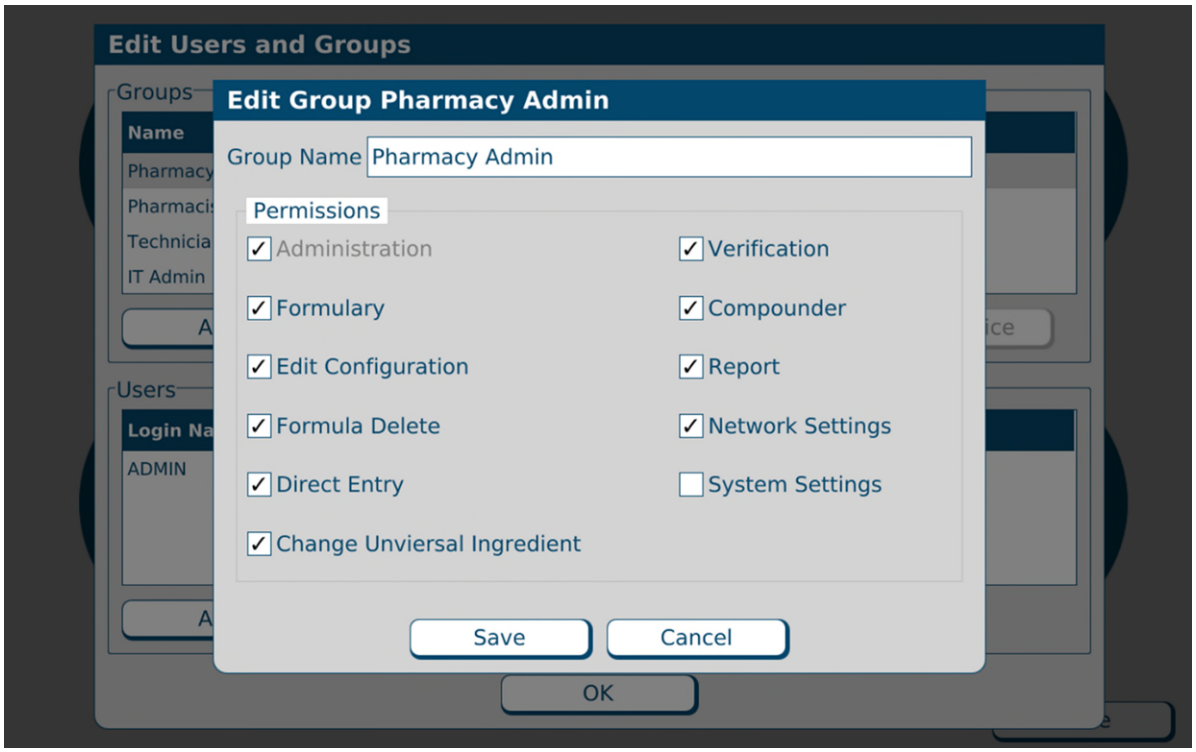
2. At the *Edit Users and Groups* window, in the top half, do one of these options:

- Tap **Add** to add a group.

  The *Add Group* window appears.

- Select the group you want to edit from the **Name** list, then tap **Edit**.

  The *Edit Group <name>* window appears.



Edit Group <name> window

3. At the *Add Group* window or *Edit Group <name>* window, select the permissions for the group.

IMPORTANT! These permissions will apply to an entire group of users. You cannot assign unique permissions directly to a user; however, you can create a group that contains only one user.

Permissions	Allowed Functions	Baxter recommends assigning to:
Administration	• Use Tools > Options • Use Tools > Users > Edit Users and Groups • Use the Inlet Editor • Use the Bag Inventory Editor • Add / Update Flow Factors • Update Date/Time • Restore Database & access device logs.	Pharmacy Admin and IT Admin
Formulary	• Use the Formulary Editor • Use the Ingredient Group Editor	Pharmacy Admin
Edit Configuration	Use the Configuration Editor	Pharmacy Admin
Direct Entry	Create and save direct-entry formulas	Pharmacy Admin, Pharmacist and Technician

Permissions	Allowed Functions	Baxter recommends assigning to:
Formula Deletion	Delete a formula	Pharmacy Admin
Change Universal Ingredient	Change the Universal Ingredient without changing the configuration	Pharmacy Admin, Pharmacist and Technician
Verification	• Perform cosignature authorization of the priming and verifying steps during setup • Perform authorization and cosignature authorization of the MixCheck Reports	Pharmacy Admin and Pharmacist
Compounder	• Calibrate the load cell • Select the configuration • Change the tube set • Prime the inlets • Calibrate the compounder • Compound the solution • Edit the source remainders	Pharmacy Admin, Pharmacist and Technician
Report	• View reports • Export reports • Print reports (except MixCheck Report)	Pharmacy Admin, IT Admin Pharmacist and Technician
Network Settings	• Authentication type (username/password OR certificate based) • Username & Password to access server share • Ethernet settings (enable/disable, automatic IP, static IP & DNS) • Wi-Fi settings (enable/disable, automatic IP, static IP & DNS) • Firewall settings (Allow/Reject ports, display configured ports) • Wi-Fi security protocol parameters & certificates (WEP, WPA2, WPA2-Enterprise) • Configuration of paths for PAT/FRM files (Part of Options) • Select Print Report type • Export Report Location • Database and logs Backup Location	Pharmacy Admin and IT Admin

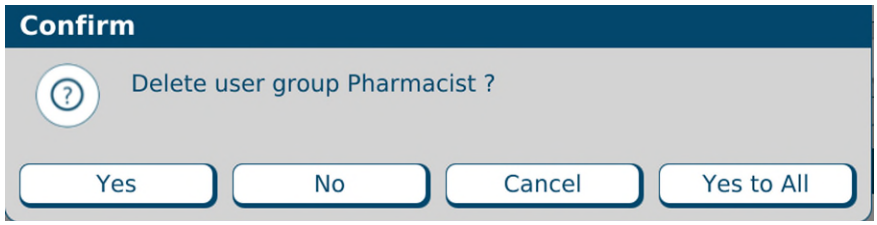
Tip! Baxter recommends having a pharmacist perform the verification.

4. Tap **Save**.
5. At the *Edit Users and Groups* window, tap **OK**.

Deleting a Group

IMPORTANT! This function requires Administration permissions.

1. At the menu screen, tap **Tools > Users > Edit Users and Groups**.
2. At the *Edit Users and Groups* window, in the top half:
   a. Select the group you want to delete from the **Name** list.
   b. Tap **Delete**.
3. At the *Delete user group <name>?* message, tap **Yes** to delete the group.



Message

4. At the *Edit Users and Groups* window, tap **OK**.

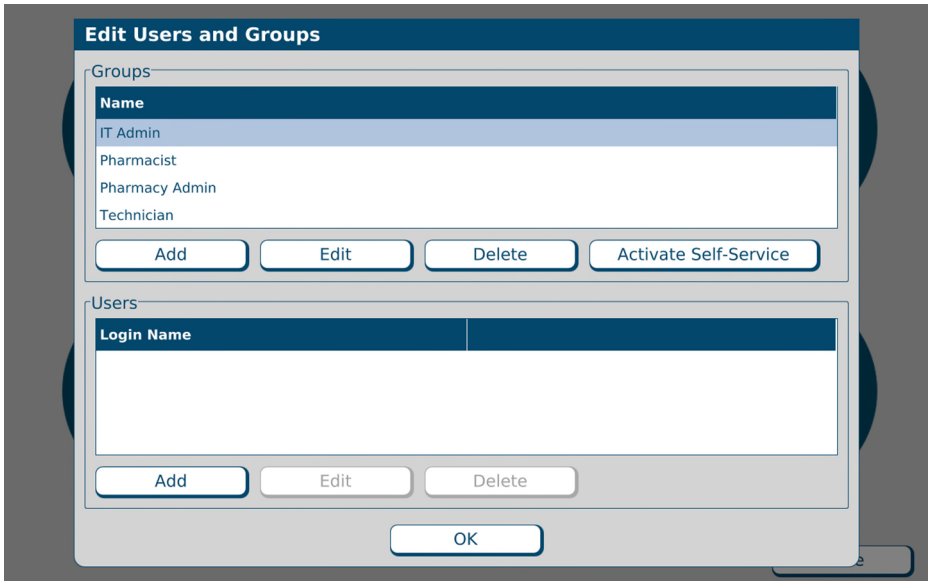
WORKING WITH USERS

Adding or Editing a User

IMPORTANT! These functions require Administration permissions.

1. At the menu screen, tap **Tools > Users > Edit Users and Groups**.

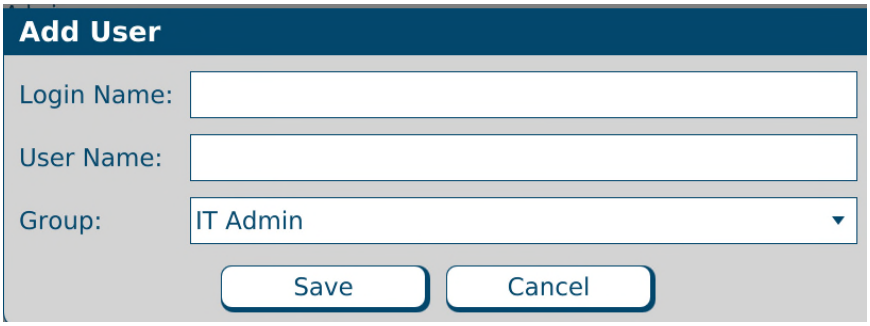
   The *Edit Users and Groups* window appears.



Edit Users and Groups window

2. At the *Edit Users and Groups* window:
   a. In the top half, select the group from the **Name** list.
   b. In the bottom half, do one of these options:
      - Tap **Add** to add a user.

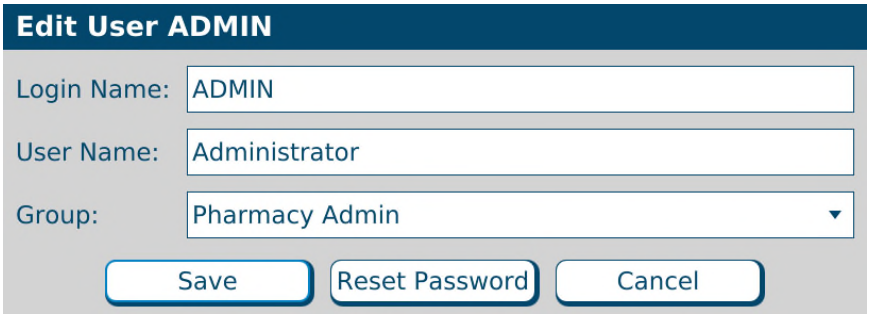
        The *Add User* window appears.



Add User window

      - Select the user you want to edit from the **Login Name** list, then tap **Edit**.

        The *Edit User <name>* window appears.



Edit User <name> window

3. At the *Add User* window or *Edit User <name>* window:
   a. Enter the **Login Name**.
   b. Enter the **User Name**.

      Tip! Baxter recommends using a short **Login Name** and full **User Name**.

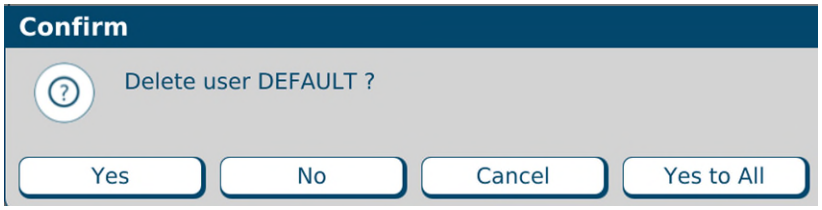
   c. Select the **Group** to which the user is assigned.
   d. Tap **Save**.
4. At the *Edit Users and Groups* window, tap **OK**.

   NOTE: The password will be the same as the **Login Name** until the user logs in and changes the password. Baxter requires that new users change their passwords upon their first login attempt. The maximum number of login attempts allowed is 3. You may wait 5 minutes to try again or an administrator may reset your password.

Deleting a User

IMPORTANT! This function requires Administration permissions.

1. At the menu screen, tap **Tools > Users > Edit Users and Groups**.
2. At the *Edit Users and Groups* window:
   a. In the top half, select the group from the **Name** list.
   b. In the bottom half, select the user you want to delete from the **Login Name** list, then tap **Delete**.
3. At the *Delete user <name>?* message, tap **Yes** to delete the user.



Message

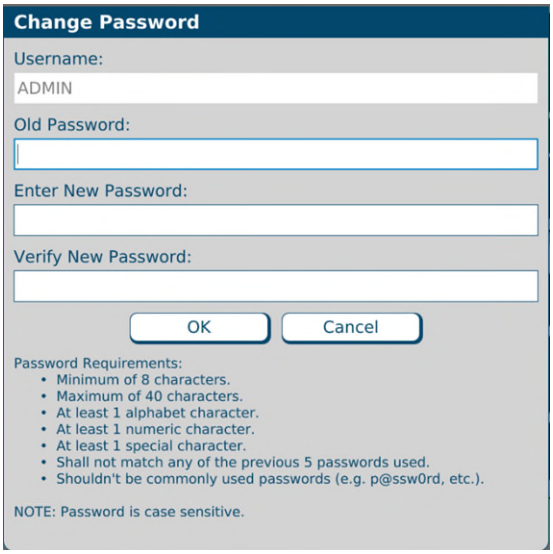
4. At the *Edit Users and Groups* window, tap **OK**.

Changing a Password

1. At the menu screen, tap **Tools > Users > Change Password**.
2. At the *Change Password* window:
   a. Enter the **Old password**.
   b. Enter the **new password**.
   c. Enter the **new password** again to confirm it.
   d. Tap **OK**.

IMPORTANT! Passwords are case-sensitive.

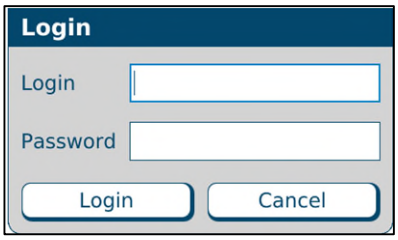
Baxter requires that a new password shall be a minimum of 8 characters and a maximum of 40 characters. It shall contain at least 1 number, 1 alphabetic letter, and 1 special character. Also, it shall not match any of the previous 5 passwords or any commonly used passwords.



Change Password window

Logging in as a Different User

1. At the menu screen, select **Tools > Users > Change User**.
2. At the *Login* window:
   a. Enter a different **Login** name.
   b. Enter the **Password**. (**NOTE:** Passwords are case-sensitive)
   c. Tap **Log In**.



Login window

NOTE: The maximum number of login attempts allowed is 3. You may wait 5 minutes to try again or an administrator may reset your password

USING THE CONFIGURATION EDITOR

Use the Configuration Editor to manage the configurations.

IMPORTANT! These functions require Edit Configuration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125. Before making any changes in the Configuration Editor, contact Baxter Technical Support. Refer to Getting Help on Page 20.

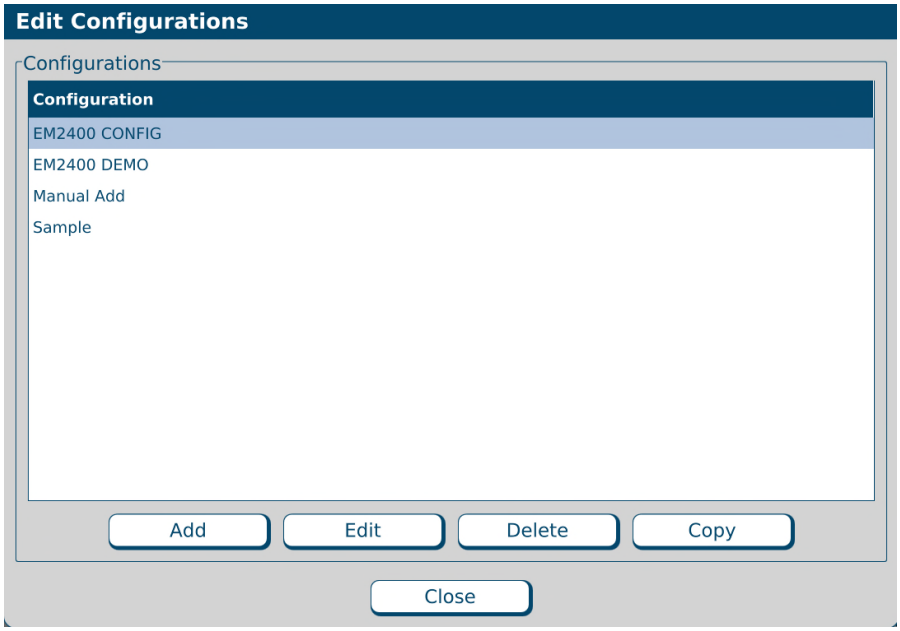
IMPORTANT! The Configuration Editor is to be used only to create and manage non-active configurations. All changes to the Universal Ingredient of an active configuration must be made through the Changing the Universal Ingredient functionality described on Page 97.

Tip! Baxter recommends using the Configuration Guidance on Page 138 when creating or editing configurations.

At the menu screen, tap **Edit > Configuration Editor**.

Menu screen, Edit menu

The *Edit Configurations* window appears. It lists the available configurations and allows you to add, edit or delete configurations.



Edit Configurations window

ADDING OR EDITING A CONFIGURATION

WARNING

It is strongly recommended that a Baxter Technical representative review and approve every new or edited configuration before it is placed into service.

Baxter Technical Support is available for reviewing and approving all new and updated configurations. Refer to Getting Help on Page 20 for additional instruction.

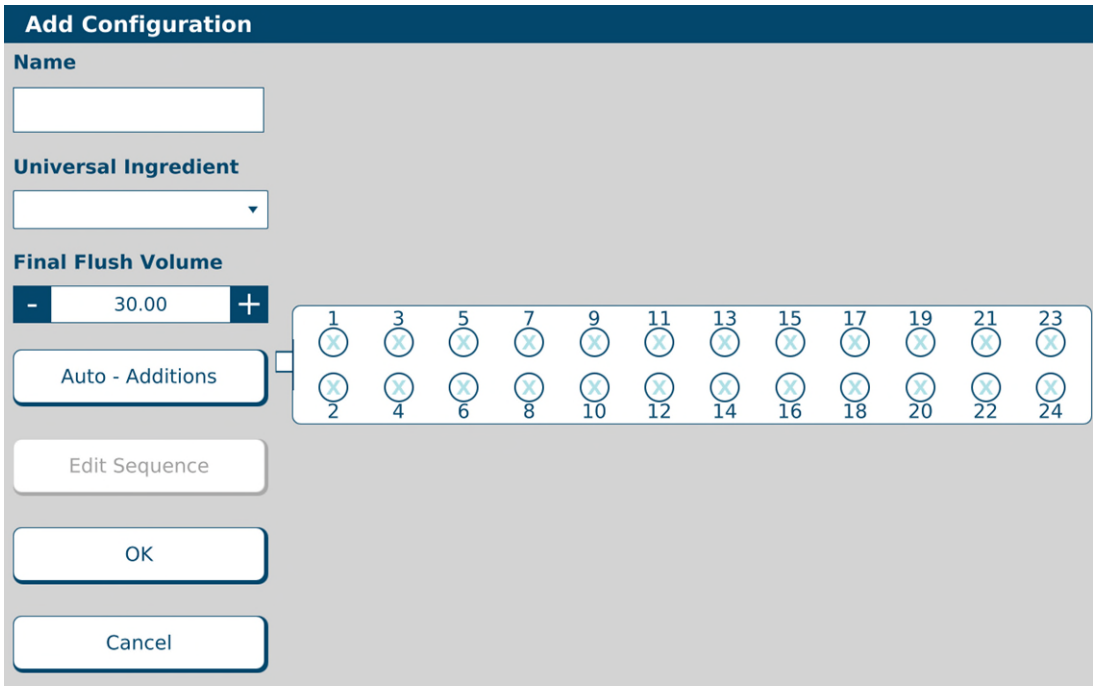
1. At the *Edit Configurations* window, do one of these options:
   - Tap **Add** to add a configuration.

     The *Add Configuration* window appears.
   - Select the configuration you want to edit, then tap **Edit**.

     The *Edit Configuration <name>* window appears.
   - Select the configuration you want to copy and then tap **Copy**.

     The *Copy of <copied configuration name>* window appears.

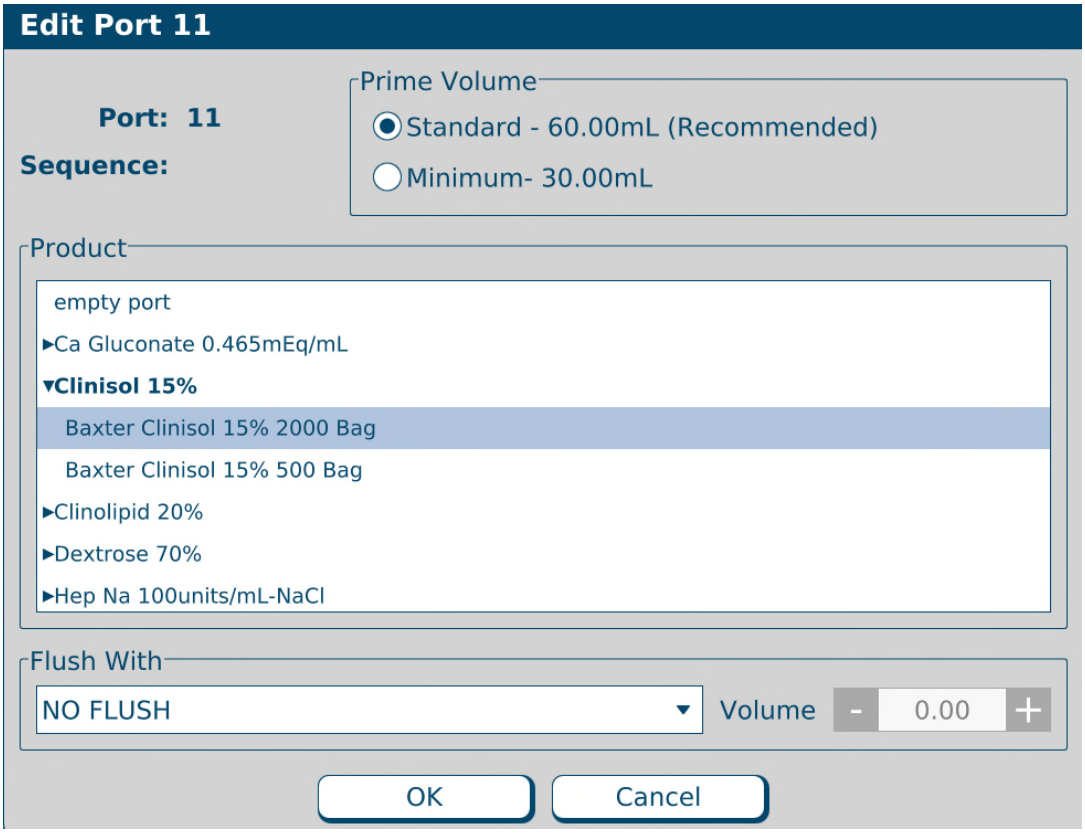
     NOTE: You can use the **Copy** option to make minor edits to an existing configuration and save it with a new name.



Add Configuration window

2. Enter the **Name** of the configuration.
3. Tap a port.

   The *Edit Port <number>* window appears.



Edit Port <number> window

4. At the *Edit Port <number>* window:

a. Select the **Product** to associate with the port.

NOTE: For a product to appear in the list, it must first be in the formulary and active. Refer to Using the Formulary Editor on Page 143.

b. Select the **Prime Volume**. You can leave the standard volume that is automatically selected, or select the minimum volume.

Tip! Baxter recommends using the standard prime volume to ensure that the inlets are primed and any bubbles are removed.

NOTE: The prime volume is used during setup of the compounder. This volume must be set for each product that is in each configuration. Auto-addition ingredients are always primed with the standard volume.

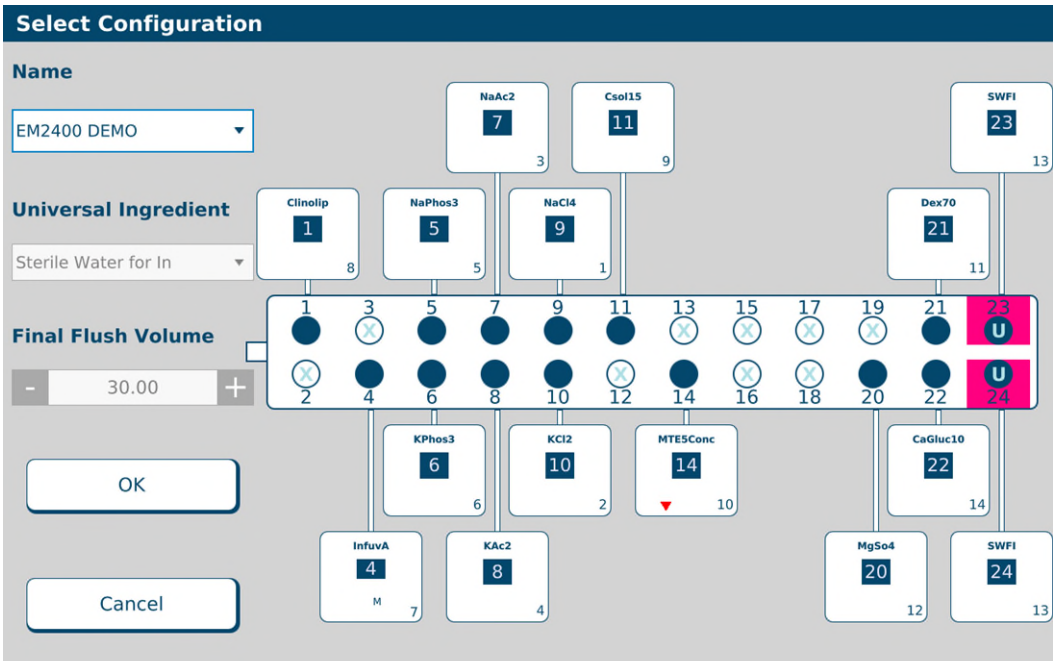
c. If the selected product requires an ingredient flush after it is delivered, select the flush ingredient in the **Flush With** list and set the flush volume in the **Volume** field.

NOTE: For example, to force a flush when lipids are pumped in a 3-in-1 bag, set the port with the appropriate flush ingredient and volume. Typically, the flush ingredient is the Universal Ingredient, but it can be any ingredient in the configuration and the formula. For an ingredient to appear in the **Flush With** list, it must first be specified as an allowable Universal Ingredient in the formulary. Refer to Using the Formulary Editor on Page 143.

d. Tap **OK**.

5. Repeat Steps 3 and 4 for all the ports you want to use.

The configuration window now shows the product that is associated with each port. If you requested an ingredient flush for a product, the ingredient button includes a red downward arrow that represents the flush. If the ingredient is set to use the minimum prime volume, the ingredient button includes the letter M.



Configuration window with products

6. At the configuration window:

a. Select the **Universal Ingredient**.

NOTE: For the Universal Ingredient to appear in the list, it must first be in the configuration. Universal Ingredients must be assigned to ports 19–24; they cannot be assigned to ports 1–18. A port specified for the Universal Ingredient is labeled **U**. For commonly used ingredients such as the Universal Ingredient, you can set up an electronic Y-site.

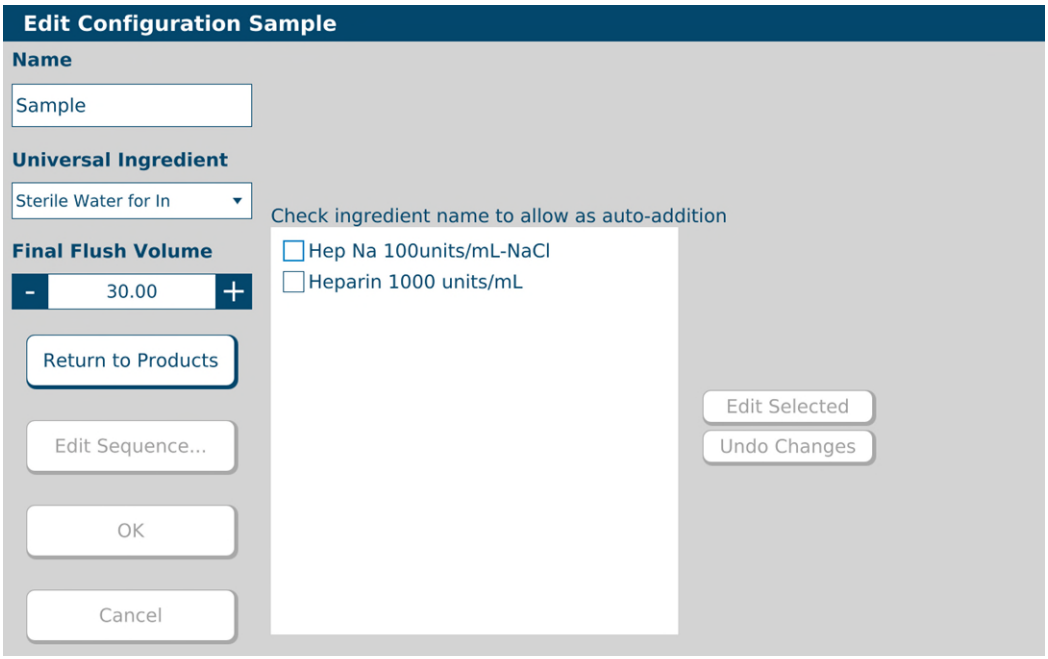
b. Enter the **Final Flush Volume**.

Tip! Each formula must include at least this volume of the Universal Ingredient. Baxter recommends using at least 30 mL. The minimum is 25 mL.

c. If you want to specify ingredients for auto-addition, tap **Auto-Additions**. Otherwise, skip to Step 8.

A list of ingredients that are available for auto-addition appears on the right side of the window.

NOTE: For the ingredient to be listed as available for auto-addition, it must first be specified as an allowable auto-addition in the formulary. Refer to Using the Formulary Editor on Page 143.



Selecting auto-additions

7. To select auto-additions:

a. Select the check box for each desired ingredient.

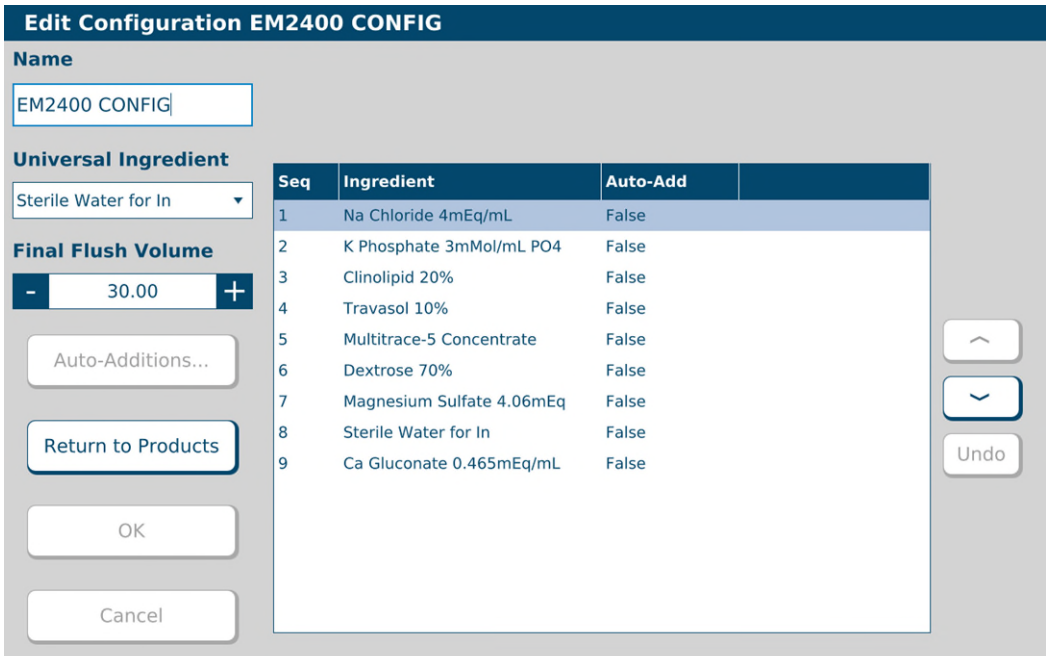
b. To select a specific product or add an ingredient flush for the selected ingredient, tap **Edit Selected**.

c. When you are finished, tap **Return to Products**.

8. At the configuration window, tap **Edit Sequence**.

NOTE: This option is available only for existing configurations. If you do not edit the sequence (pumping order), the compounder will use the sequence of the port numbers (1, 2, 3 and so on).

A sequential list of ingredients appears on the right side of the window.



Editing the sequence

9. To edit the sequence:
   a. Select an ingredient, then use the arrows to move it up or down in the sequence.
   b. When you are finished, tap **Return to Products**.

10. At the configuration window, tap **OK**.
11. At the *Edit Configurations* window, tap **Close**.

WARNING
A Baxter pharmacist must approve every new or edited configuration before it is placed into service.

12. Print a Configuration Report for the new or edited configuration. Refer to Configuration Report on Page 180.

CONFIGURATION GUIDANCE

There are two primary guiding requirements for port placement and ingredient sequencing in a configuration:

1. To minimize or eliminate opportunities for chemical interaction between concentrated ingredients
2. To maximize the efficiency of valve movement

In view of these requirements, there are certain ingredients that should never be placed on the compounder, and as a result must be added as a “manual add”. These ingredients include:

- Iron-containing salts – highly reactive and will cause lipid emulsions to crack
- Insulin – adsorbs onto PVC tubing and causes unreliable drug delivery

- Albumin >10% – this is a harvested blood protein whose behavior within the pumping system can be inconsistent due to the variant viscosity of the product.

Every configuration requires a *Universal Ingredient* (UI), which is the ingredient that is in the common fluid path when pumping starts, and is the last ingredient pumped to clear the common fluid path when a preparation is complete. Typically, the UI is Sterile Water for Injection (SWFI), although it may be other ingredients such as dextrose or amino acids depending on the requirements of the order. The UI must be mounted on ports 19 or greater; preferably mounted on port 23 and/or 24. If not ports 23 or 24, the UI must be mounted as far back on the valve set as possible to ensure complete flushing of the entire valve set.

An Electronic Y-Site allows for the same ingredient to be mounted on more than one port and is generally used with the high-volume base components, such as SWFI or Dextrose.

An Auto Addition (AutoAdd) defines those ingredients designated in the formulary that are mounted only if and when they are needed.

The compounder does allow for unique customer applications. The standard configuration below can be modified provided that the potential for chemical interactions is taken into consideration and maximization of the efficiency of valve movement is achieved.

Not all ports must be used. Depending on the customer needs and the number of ingredients to be used, ports may be omitted from the configuration. These are noted as “OPEN” in the configuration table. It is recommended to position the omitted, unused ports between the ingredient groups to allow for future additions to the configuration.

Example of a Standard Recommended Configuration

Sequence	Port	Ingredient	Comment
1	9	Sodium Chloride	-
2	8	Potassium Chloride	-
3	7	Sodium Acetate	-
4	6	Potassium Acetate	-
5	5	Sodium Phosphate	-
6	4	Potassium Phosphate	-
7	3	Multivitamins Pediatric	-
8	2	Multivitamins Adult	-
9	1	Lipids	-
10	10	Amino-Acid	AutoAdd
11	11	Amino-Acid	-
12	12	OPEN	-
13	13	Trace Elements Pediatric	-
14	14	Trace Elements Adult	-
15	15	Single Trace Element	-
16	16	Single Trace Element	-
17	17	Other TPN Drug	-
18	18	Other TPN Drug	-
19	21	Dextrose	-
20	19	L-Cysteine	-
21	20	Magnesium Sulfate	-
22	23	Sterile Water for Injection	UI, Y site
23	24	Sterile Water for Injection	UI, Y site
24	22	Calcium Gluconate	

The following offers information to support the recommended sequencing and port placement of the general categories of the standard recommended configuration.

Monovalent Salts:

Sodium chloride, potassium chloride, sodium acetate, potassium acetate, sodium phosphate, and potassium phosphate are recommended to be sequenced first (1 through 6 in the above example) and mounted on ports 4 through 10. Preferably the phosphate containing ingredients are pumped after the other salts.

Fat Soluble Ingredients (multivitamins and lipids):

Multivitamins are generally mounted on ports 3 through 5 and sequenced directly after the electrolytes.

Lipids are emulsions of oil and water, held in suspension by an anionic (negatively charged) surfactant.

Acidic ingredients will not be sequenced directly after lipids. Lipids have a very low specific gravity as compared to other ingredients. As lipids are “lighter” than other ingredients, they have the potential to “migrate” along the common fluid path. Because of this potential, it is recommended that lipids have a minimum of 4 ports separating the next sequenced ingredient. Lipids are recommended to be sequenced prior to the Aminos and are mounted on ports < 4.

Amino Acids:

This is the first major flush. Amino acids, such as Travasol, Clinisol, Prosol and Premasol, are generally one of the larger ingredient volumes in a TPN formula. These can be used to dilute the other ingredients and minimize incompatibilities. It is recommended to sequence the Lipids prior to the amino acids to assist with the dilution of the Lipids.

Multi Trace Elements:

Trace Elements, either a combination product such as Trace Elements-4 or Trace Elements-5, or individual elements such as zinc, chromium, copper and selenium are sequenced and mounted after the Amino Acids. The combination product, (Trace Elements-4 or Trace Elements-5), are preferably mounted on ports 13 or 14 and sequenced 13 or 14. The individual elements (e.g., zinc, chromium, copper, selenium), are preferably mounted directly after the combination products and before Other Drugs and Dextrose, preferably on ports 13 through 16 and sequenced 13 through 16.

Other TPN Ingredients:

Include ingredients such as famotidine, ranitidine, heparin, and L-carnitine which are mounted and sequenced after the Trace Elements.

Dextrose:

This is the second major flush. Dextrose is also one of the larger ingredient volumes in a TPN formula. It is mounted next to or immediately before SWFI and sequenced after the Trace Elements and Other Drugs to assure maximum dilution before Magnesium and Calcium products are pumped. This will minimize the inherent physical incompatibilities.

Divalent Salts - Magnesium:

Di-valent cations also affect the stability of lipids. Magnesium and calcium are the most common of these found in a TPN formula. Magnesium should be mounted after the Trace Elements and Other TPN Ingredients groupings and sequenced after Dextrose and before SWFI to maximize dilution of the lipids.

Sterile Water for Injection (SWFI):

This is the final major flush. Sterile water for injection is used to calibrate the compounder. Every configuration should require the presence of Sterile Water for Injection.

SWFI is mounted last and generally sequenced after the Magnesium products to maximize the dilution of the solution and flush the valve set prior to the addition of the Calcium product (the final ingredient).

Divalent Salts - Calcium:

The interaction of calcium and phosphorus to form insoluble calcium phosphate is the most critical interaction to address. Calcium phosphate precipitates immediately in most aqueous solutions. It is the buffering provided by the amino acids in a TPN that permit small quantities of calcium and phosphorus to be mixed without forming a precipitate. The smaller the concentrations of calcium and phosphorus at the time they are mixed, the less likely it is that a precipitate will form. This condition occurs when Calcium is added last, with phosphate being diluted as much as possible in the TPN. On the EM2400 TPN Compounder, the phosphate-containing salts (sodium phosphate and potassium phosphate) are added early within the electrolyte group, generally sequenced < 10 and on ports < 10. The calcium salts are added last and mounted on port > 20, after the addition of amino acids; dextrose and water provide the maximum dilution of the phosphate salt.

Exceptions:

L-cysteine and ascorbic acid are included in this group. However, these ingredients are highly acidic and may react with other ingredients.

L-cysteine is highly acidic (very low pH 1.4) and affects the stability of lipids (“cracking”) as well as having undesirable interactions with other TPN ingredients, such as:

- Folic acid – orange precipitate
- Cimetidine – cysteine-cimetidine complex green in color
- Copper – cysteine-copper complex green in color

Ascorbic acid reacts with copper and other heavy metals that are components of Trace Elements resulting in the degradation of the Ascorbic acid. Therefore, L-cysteine and Ascorbic acid are to be mounted at least 2 ports after the Trace Element group and sequenced directly after the Dextrose and before Magnesium group.

Non-TPN Ingredients:

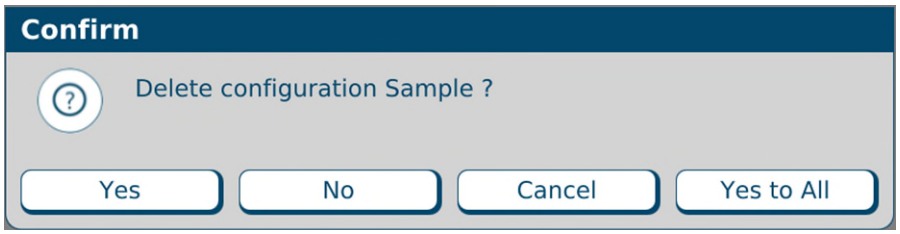
These ingredients include Anticoagulant Citrate Dextrose (ACD)/Citrate Phosphate Dextrose (CPD), Tromethamine (THAM), sodium bicarbonate, mannitol, lidocaine, and bupivacaine. These ingredients are not used in TPN but in the compounding of other non-TPN preparations.

The recommended practice is to set up a separate software configuration to accommodate the non-TPN use e.g., cardioplegia, Continuous veno-venous hemodialysis (CVVHD), epidurals. To avoid the potential for error, these ingredients should not be included in any TPN configuration, even as an Auto-Addition.

DELETING A CONFIGURATION

1. At the *Edit Configurations* window:
   a. Select one or more configurations you want to delete.
   b. Tap **Delete**.
2. At the *Delete configuration <name>?* message, tap**:**
   - **Yes** to delete the configuration
   - **Yes to All** to delete all configurations selected in the *Edit Configurations* window

   NOTE: If only one configuration is selected, only one will be deleted.



Message

3. At the *Edit Configurations* window, tap **Close**.

USING THE FORMULARY EDITOR

Use the Formulary Editor to manage the ingredients and products in the formulary.

IMPORTANT! These functions require Formulary permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125. Before making any changes in the Formulary Editor, contact Baxter Technical Support. Refer to Getting Help on Page 20.

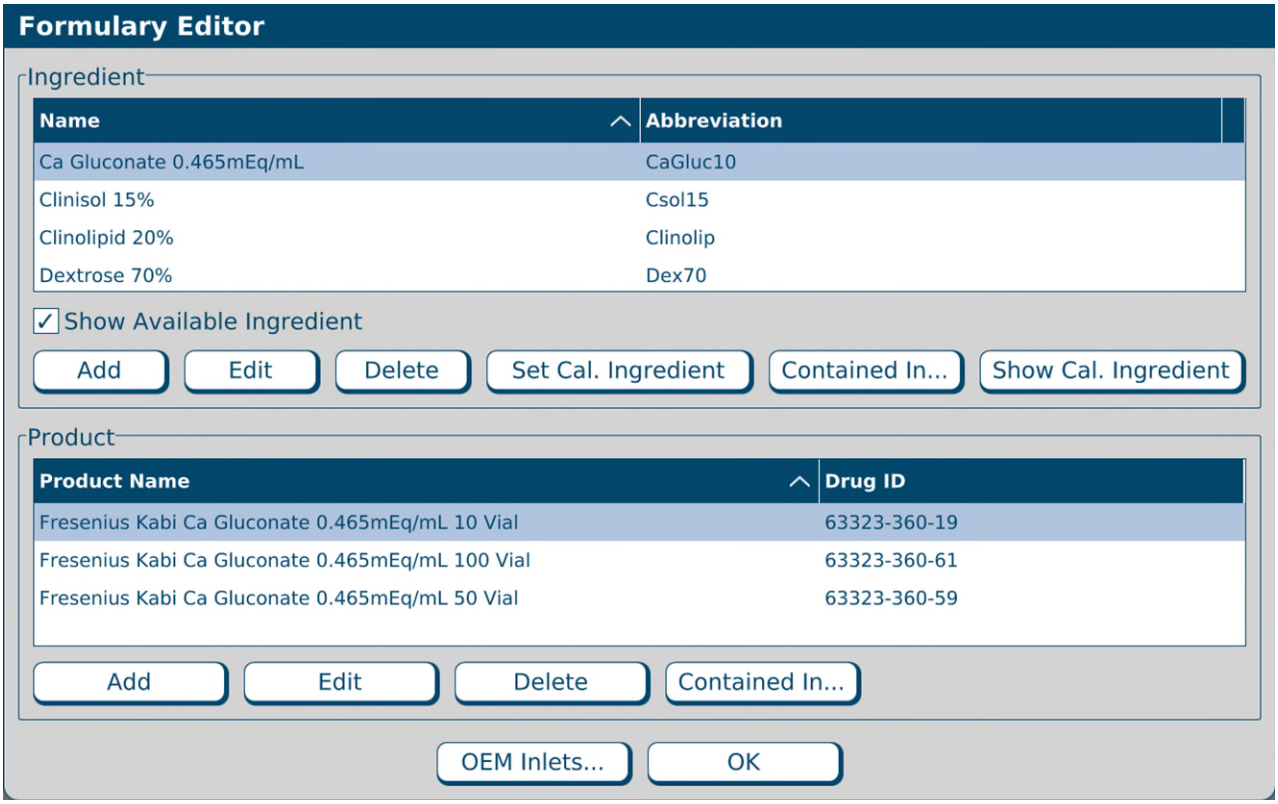
At the menu screen, tap **Edit > Formulary Editor**.

Menu screen, Edit menu

The *Formulary Editor* window appears. The top list identifies the ingredients that can be included in a formula. The bottom list identifies each **Product Name**, with its **Drug ID**, that can be used for each ingredient type.

If the "Show Available Ingredient" box is checked, only available ingredients will be displayed. Unchecking the box will show all the ingredients in the formulary. Refer to Adding or Editing an Ingredient on Page 145 to edit an ingredient's availability.

Tapping the **Inlets** button displays the Inlet Editor. For instructions on using this feature, refer to Using the Inlet Editor on Page 155.



Formulary Editor window

WORKING WITH INGREDIENTS

Adding or Editing an Ingredient

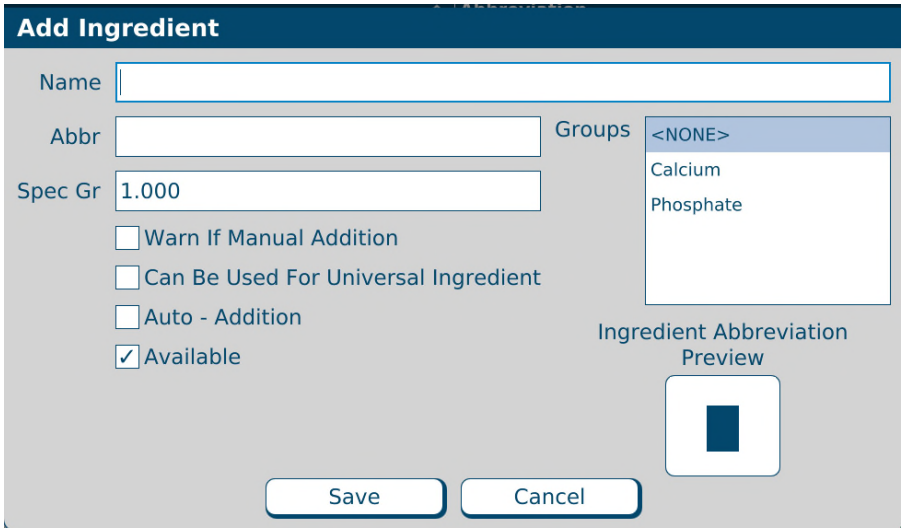
1. At the *Formulary Editor* window, in the top half, do one of these options:

- Tap **Add** to add an ingredient.

  The *Add Ingredient* window appears.

- Select the ingredient you want to edit from the **Name** list, then tap **Edit**.

  The *Edit Ingredient <name>* window appears.



Add Ingredient window

2. At the *Add Ingredient* window or *Edit Ingredient <name>* window:

a. Enter the **Name**.

b. Enter the **Abbr** (abbreviation).

> **NOTE:** The information entered in the **Abbr** field will appear on the Ingredient Abbreviation preview and in the ingredient button on the pump screen.

c. Enter the **Spec Gr** (specific gravity).

d. In the **Groups** list, select the group to which the ingredient belongs. For more information, refer to Using the Ingredient Group Editor on Page 151.

e. If desired, select one or more of these check boxes:

- **Warn If Manual Addition** to make a message appear when a formula that includes this ingredient is used, but this ingredient is not in the current configuration
- **Can be used for Universal Ingredient** to allow this ingredient to be used as a Universal Ingredient
- **Auto-addition** to allow this ingredient to be added for temporary use at an open port
- **Available** to mark this ingredient available in the formulary. Uncheck this box if an ingredient becomes unavailable.

f. Tap **Save**.

Deleting an Ingredient

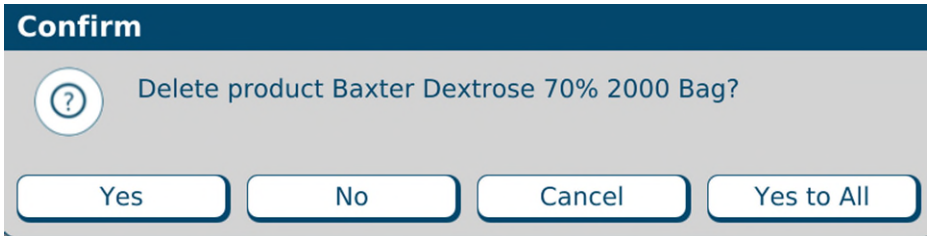
1. At the *Formulary Editor* window, in the top half:
   a. Select one or more ingredients you want to delete from the **Name** list.
   b. Tap **Delete**.
2. At the *Delete ingredient <name>?* message, tap:
   - **Yes** to delete the ingredient

     NOTE: All products under an ingredient must be deleted in order to delete the ingredient.

   - **Yes to All** to delete all ingredients selected in the *Formulary Editor* window

     NOTE: If only one ingredient is selected, only one will be deleted.

   Tip! If an ingredient becomes temporarily unavailable, you can mark the ingredient unavailable in the Formulary Editor. For details, refer to Adding or Editing an Ingredient on Page 145.

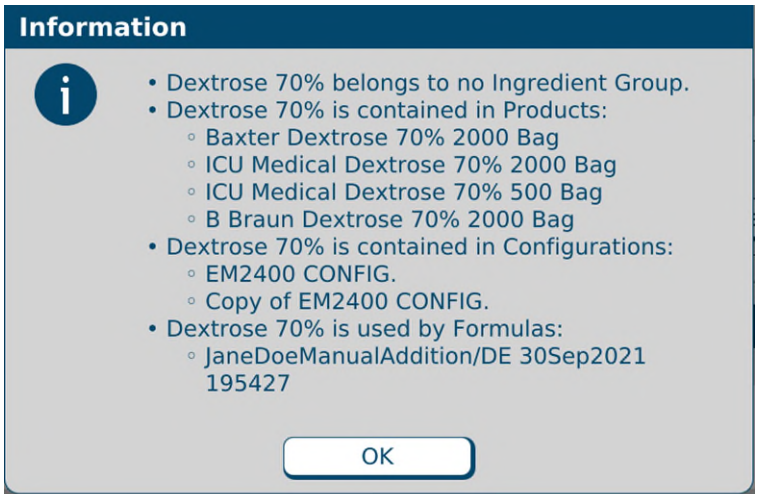


Message

Viewing an Ingredient's Usage Information

1. At the *Formulary Editor* window, in the top half:
   a. Select the ingredient you want to view from the **Name** list.
   b. Tap **Contained In**.

      A message with the ingredient's current usage appears, including:
      - The groups to which the ingredient belongs
      - The products that contain the ingredient
      - The configurations and formulas that contain the ingredient
2. At the *Information* message, tap **OK**.



Message

The Calibration Ingredient

The calibration ingredient is used for calibrating the compounder's pump.

WARNING
A sterile water product is required as the calibration ingredient.

If you think the calibration ingredient needs to be changed, contact Baxter Technical Support. Refer to Getting Help on Page 20.

Viewing the Calibration Ingredient

1. At the *Formulary Editor* window, in the top half, tap **Show Cal. Ingredient**.

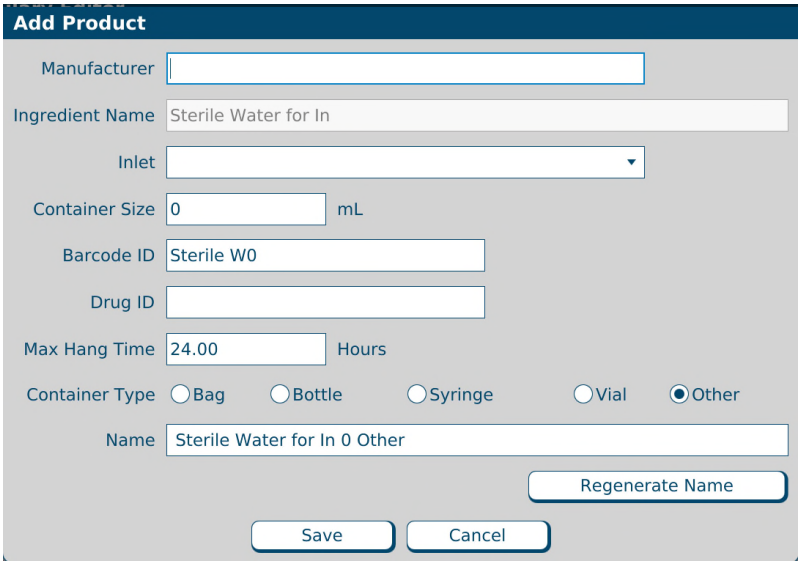
   The calibration ingredient is highlighted.
2. Tap **OK**.

WORKING WITH PRODUCTS

Adding or Editing a Product

1. At the *Formulary Editor* window:
   a. In the top half, select the ingredient from the **Name** list.
   b. In the bottom half, do one of these options:
      - Tap **Add** to add a product.

        The *Add Product* window appears.
      - Select the product you want to edit from the **Product Name** list, then tap **Edit**.



Add Product window

2. At the Add Product window or Edit Product <name> window:
   a. Enter the product's **Manufacturer**.

      NOTE: The **Ingredient Name** field populates automatically with the ingredient name in the formulary. You cannot change this field.

      WARNING

      It is important to select the correct inlet type for the container. Selecting the incorrect inlet type can lead to occlusions and incorrect volume delivery, resulting in patient harm.

   b. Select the appropriate **Inlet** for the container. For information about the available inlet types, refer to Inlets on Page 17.
   c. Enter the **Container Size**.
   d. Scan the barcode to enter the **Barcode ID**.

      NOTE: For items that do not have a Barcode ID from the manufacturer, you can enter the data manually.

      Tip! Baxter recommends always using the barcode scanner when possible.

WARNING

If a Drug ID is assigned to one product in the order-entry software, and that number is assigned to a different product in the compounder's formulary, the compounder may pump the wrong ingredient. *It is the user's responsibility to ensure that Drug ID numbers are properly and consistently assigned in both systems.*

e. Enter the **Drug ID**.

NOTE: The Drug ID is used to identify products uniquely. In the United States, the Drug ID is usually the NDC.

f. Enter the **Max Hang Time**.

NOTE: This setting is the maximum amount of time the product can be attached to the compounder. The compounder displays a message if the product remains attached longer than the specified time.

g. Select the product's **Container Type**.

h. If you want to change the **Name**, tap **Regenerate Name** or enter a new name.

NOTE: Based on the product information, the **Name** is generated automatically for new products. This name is used when the product's barcode is printed.

i. Tap **Save**.

Deleting a Product

1. At the *Formulary Editor* window:

a. In the top half, select the ingredient from the **Name** list.

b. In the bottom half, select one or more products you want to delete from the **Product Name** list, then tap **Delete**.

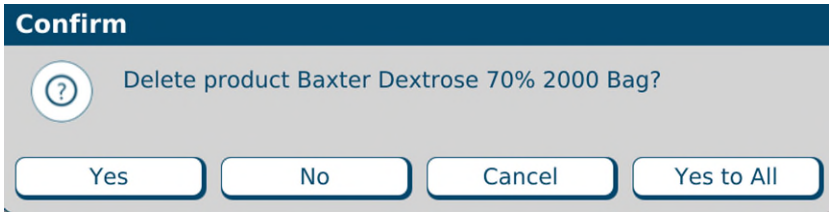
2. At the *Delete product <name>?* message, tap:

- **Yes** to delete the product from the ingredient

  NOTE: The product must not be contained in any configurations in order to be deleted.

- **Yes to All** to delete all products selected in the *Formulary Editor* window

  NOTE: If only one product is selected, only one will be deleted.



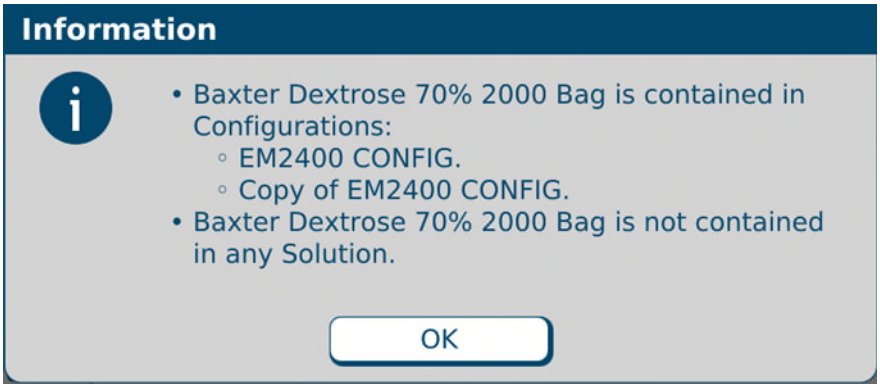
Message

Viewing a Product's Usage Information

1. At the *Formulary Editor* window:
   a. In the top half, select the ingredient from the **Name** list.
   b. In the bottom half, select the product you want to view from the **Product Name** list, then tap **Contained In**.

      A message with the product's current usage appears, including:

      - The configurations that contain the product
      - The solutions that contain the product
2. At the *Information* message, tap **OK**.



Message

USING THE INGREDIENT GROUP EDITOR

Use the Ingredient Group Editor to manage the ingredient groups, assign the products that are in the formulary to the correct groups and specify which groups are incompatible.

WARNING

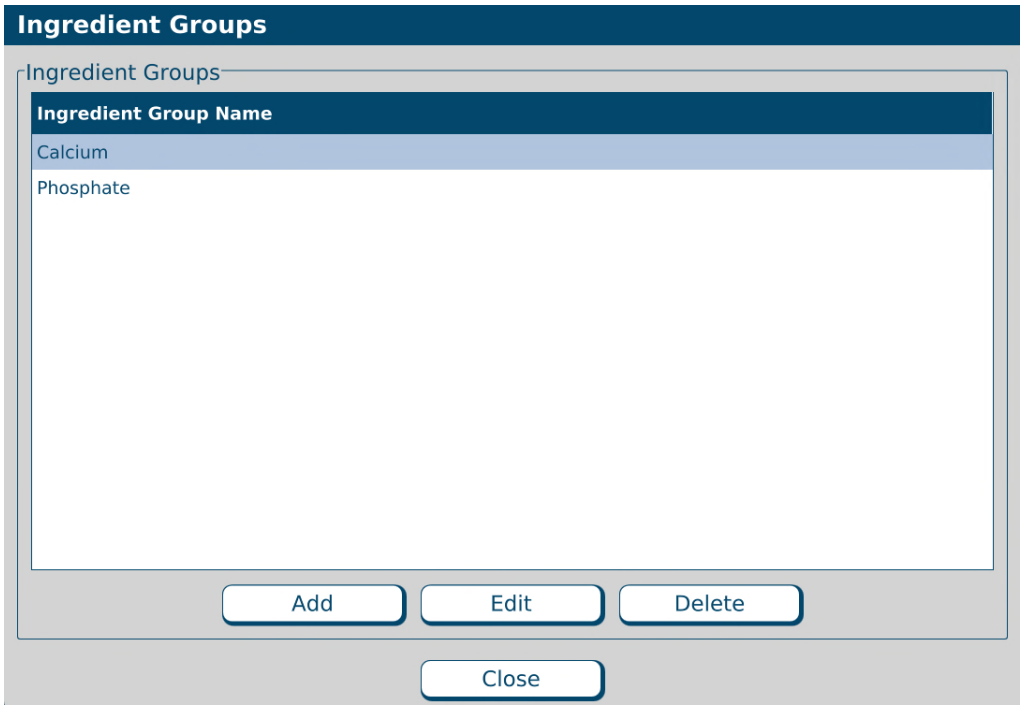
Any calcium-containing products must be assigned to the calcium members group, and any phosphate-containing products must be assigned to the phosphate members group to ensure the software will warn users about formulas that may cause a precipitate in the tube set during the compounding process.

IMPORTANT! These functions require Formulary permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125. Before making any changes in the Ingredient Group Editor, contact Baxter Technical Support. Refer to Getting Help on Page 20.

At the menu screen, tap **Edit > Ingredient Group Editor**.

Menu screen, Edit menu

The *Ingredient Groups* window appears. It lists the available ingredient groups and allows you to add, edit or delete ingredient groups. **Calcium** and **Phosphate** groups are created automatically.



Ingredients Groups window

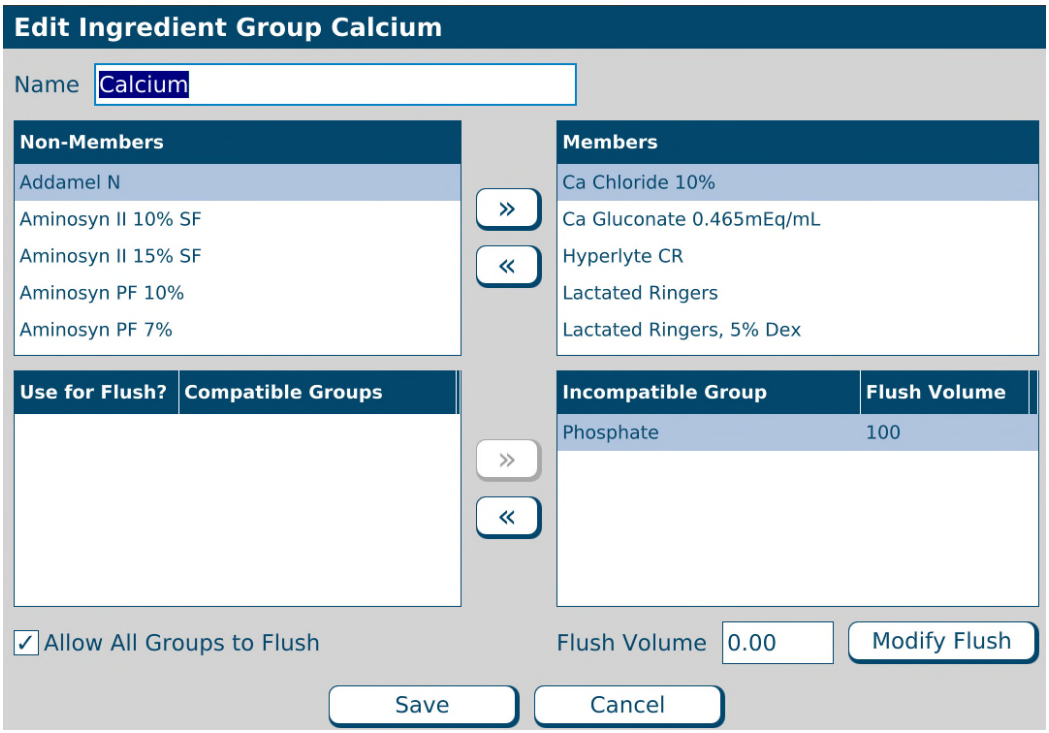
ADDING OR EDITING AN INGREDIENT GROUP

1. At the *Ingredient Groups* window, do one of these options:

- Tap **Add** to add a new ingredient group.

  The *Add Ingredient Group* window appears.
- Select the group you want to edit, then tap **Edit**.

  The *Edit Ingredient Group <name>* window appears.



Edit Ingredient Group <name> window

2. Enter the **Name** of the group.
3. Specify the members of this group.
   - To add an ingredient to this group:

   a. Select the ingredient in the **Nonmembers** list.
   b. Tap **>>** to move the ingredient to the **Members** list.
   - To remove an ingredient from this group:

      a. Select the ingredient in the **Members** list.
      b. Tap **<<** to move the ingredient to the **Nonmembers** list.
4. Specify the groups that are incompatible with this group.
   - To make another group incompatible with this group:

   a. Select the other group in the **Compatible Groups** list.
   b. Enter a **Flush Volume**.

      NOTE: The flush ingredient will be any ingredient that is not listed as incompatible.

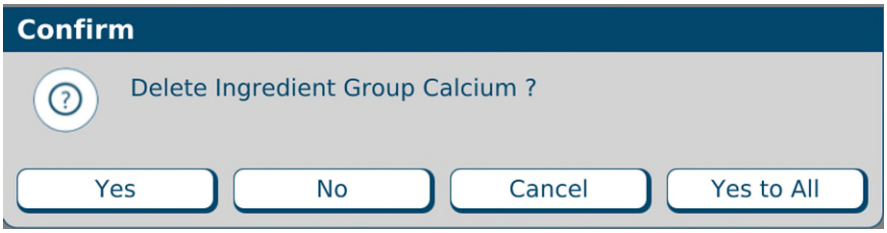
   c. Tap **>>** to move the group to the **Incompatible Groups** list.
   - To make another group compatible with this group:

      a.Select the other group in the **Incompatible Groups** list.
      b. Tap **<<** to move the group to the **Compatible Groups** list.
5. To modify the flush volume for an incompatible group:
   a. Select the group in the **Incompatible Groups** list.
   b. Edit the **Flush Volume**.
   c. Tap **Modify Flush**.
6. Tap **Save**.
7. At the *Ingredient Groups* window, tap **Close**.

DELETING AN INGREDIENT GROUP

1. At the *Ingredient Groups* window:
   a. Select one or more ingredient groups you want to delete.
   b. Tap **Delete**.
2. At the *Delete ingredient group <name>?* message, tap:
   - **Yes** to delete the ingredient group
   - **Yes to All** to delete all ingredient groups selected in the *Ingredient Groups* window

   NOTE: If only one ingredient group is selected, only one will be deleted.



Message

3. At the *Ingredient Groups* window, tap **Close**.

USING THE INLET EDITOR

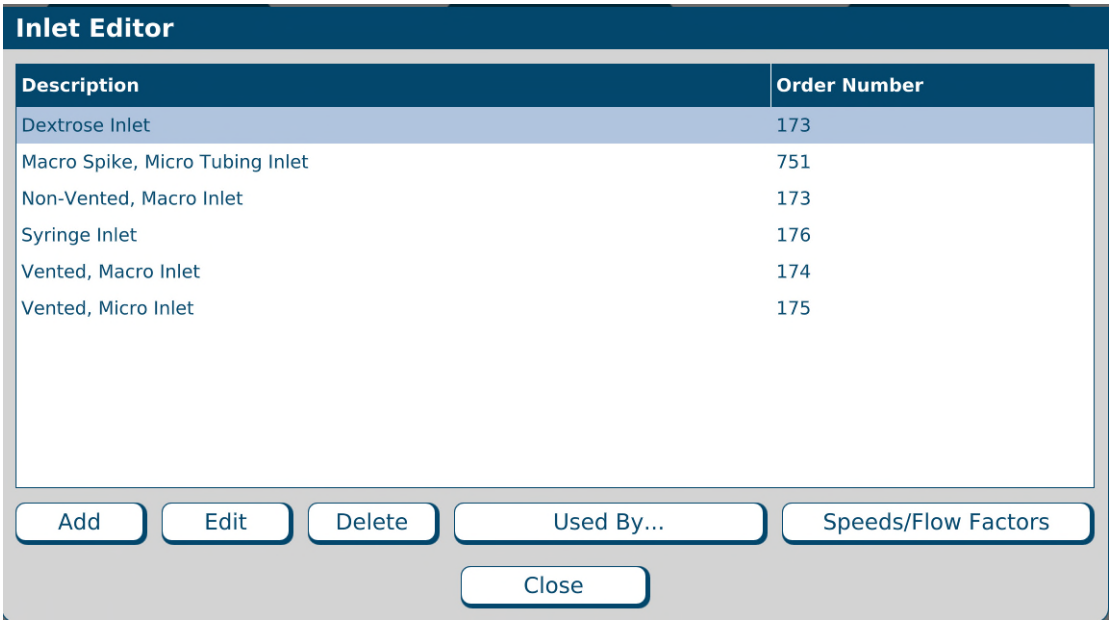
The priming volume and pumping speed for inlets may differ depending on the inlet's spike and tube diameter. The Inlet Editor allows you to adjust the priming volumes for all the inlets.

IMPORTANT! These functions require Administration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125. Before making any changes in the Inlet Editor, contact Baxter Technical Support. Refer to Getting Help on Page 20.

At the menu screen, tap **Edit > Inlet Editor**.

Menu screen, Edit menu

The *Inlet Editor* window appears. It lists the available inlets and allows you to add, edit or delete inlets.



Inlet Editor window

ADDING OR EDITING AN INLET

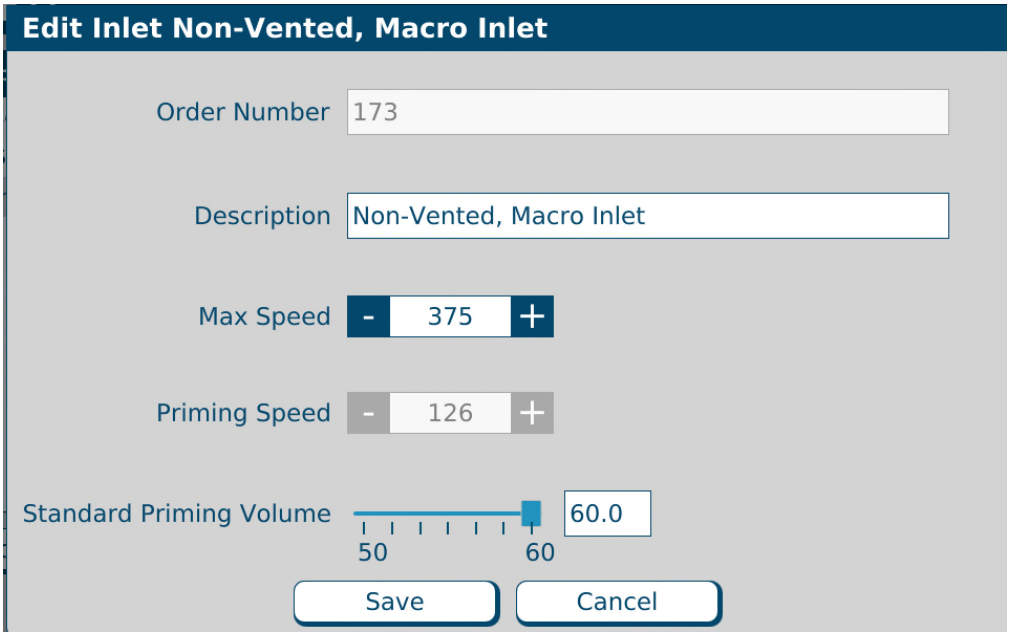
1. At the *Inlet Editor* window, do one of these options:

- Tap **Add** to add a new inlet.

  The *Add Inlet* window appears.

- Select the inlet you want to edit, then tap **Edit**.

  The *Edit Inlet <name>* window appears.



Edit Inlet <name> window

IMPORTANT! For the order number, description and recommended priming volume for each inlet, refer to Inlets on Page 17.

NOTE: Use of this function is not recommended without Baxter instruction.

WARNING

Modifying these settings without contacting Baxter Technical Support could result in ingredients over or under delivering and may cause patient harm.

2. At the *Add Inlet* window or *Edit Inlet <name>* window:
   a. Enter the **Order Number**.
   b. Enter the **Description**.

WARNING

The **Max Speed** and **Priming Speed** are set automatically. Do not change them unless directed by Baxter Technical Support.

   c. If desired, edit the **Standard Priming Volume**.

      NOTE: The software will not allow you to set a **Standard Priming Volume** that is less than what Baxter recommends.

   d. Tap **Save**.
3. At the *Inlet Editor* window, tap **Close**.

DELETING AN INLET

1. At the *Inlet Editor* window:
   a. Select one or more inlets you want to delete.
   b. Tap **Delete**.
2. At the *Delete inlet <name>?* message, tap:
   - **Yes** to delete the inlet
   - **Yes to All** to delete all inlets selected in the *Inlet Editor* window

     NOTE: If only one inlet is selected, only one will be deleted.

Message

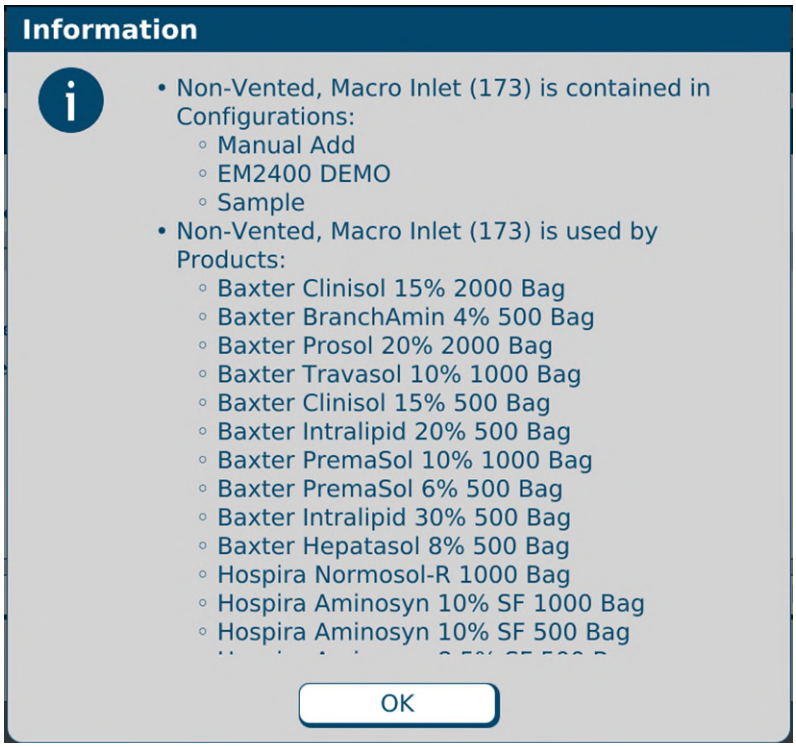
3. At the *Inlet Editor* window, tap **Close**.

VIEWING AN INLET'S USAGE INFORMATION

1. At the *Inlet Editor* window:
   a. Select an inlet.
   b. Tap **Used By**.

      A message with the inlet's usage information appears.

2. At the *Information* message, tap **OK**.



Message

3. At the *Inlet Editor* window, tap **Close**.

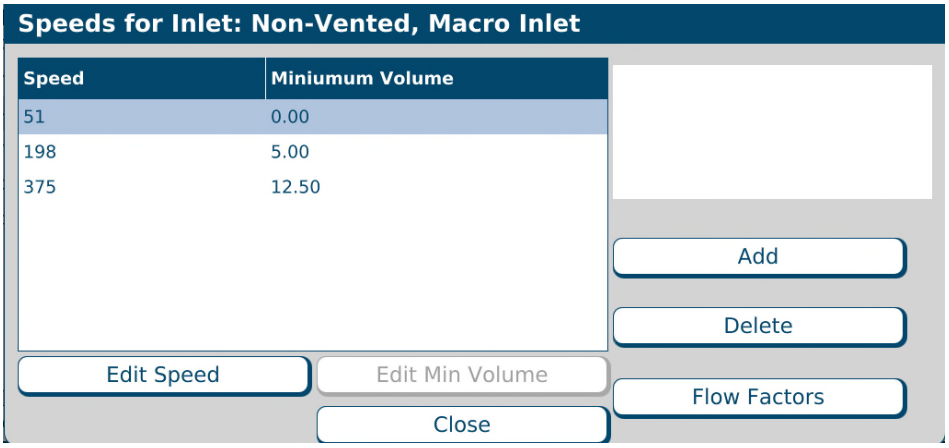
VIEWING AN INLET'S SPEEDS AND FLOW FACTORS

IMPORTANT! All the ingredients need flow factors prior to compounding. Contact Baxter Technical Support for adding/updating flow factors.

IMPORTANT! These settings affect the delivery volume, so they must be accurate. Do not make any changes unless directed by Baxter Technical Support. In the US/Canada, Baxter has determined the flow factors for all ingredients commonly used in TPN. If you think that a flow factor needs to be changed, or a flow factor for a new ingredient needs to be added, contact Baxter Technical Support. Refer to Getting Help on Page 20.

NOTE: Only the OEM user is able to view or edit the flow factors.

1. At the *Inlet Editor* window:
   a. Select an inlet.
   b. Tap **Speeds/Flow Factors**
2. At the Speeds for Inlet <name> window, follow the instructions of Baxter Technical Support.



Speeds for Inlet <name> window

3. At the *Inlet Editor* window, tap **Close**.

USING THE BAG INVENTORY EDITOR

The Bag Inventory Editor allows you to manage the bags that are available for use on the compounder.

CAUTION

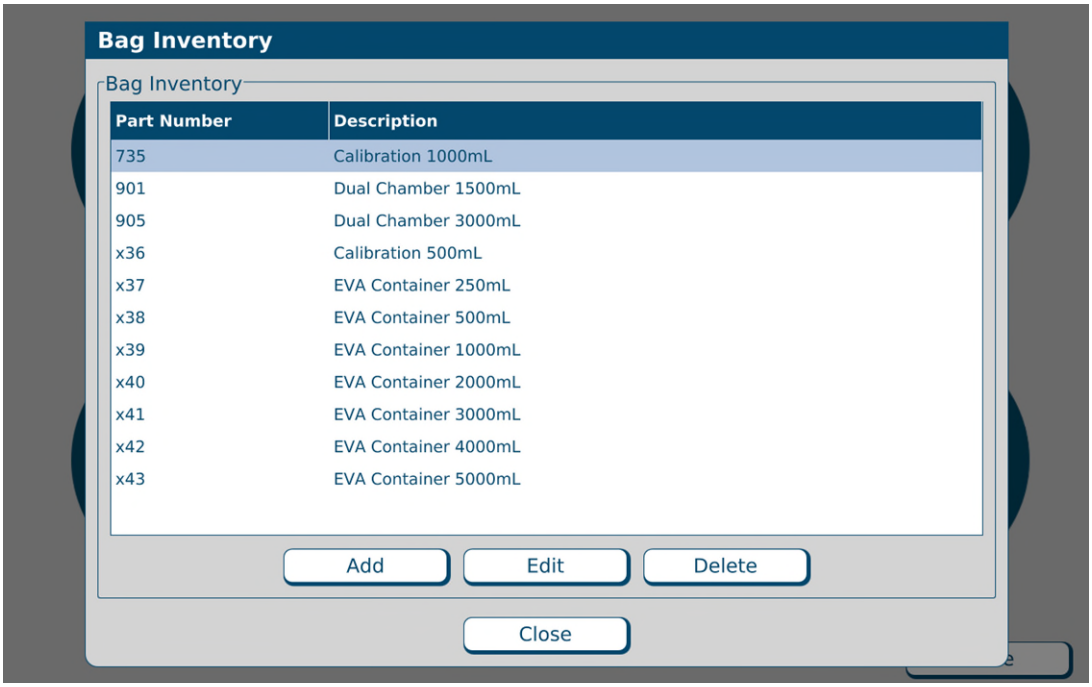
Before making any changes in the Bag Inventory Editor, contact Baxter Technical Support. Refer to Getting Help on Page 20.

IMPORTANT! These functions require Administration permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125. Use only bags validated by Baxter for use with the compounder. For details, refer to Bags on Page 18. Using non-validated bags voids all manufacturer warranties. In addition, the accuracy of the finished solution will not be validated.

At the menu screen, tap **Edit > Bag Inventor Editor**.

Menu screen, Edit menu

The *Bag Inventory* window appears. It lists the available bags and allows you to add, edit or delete bags.



Bag Inventory window

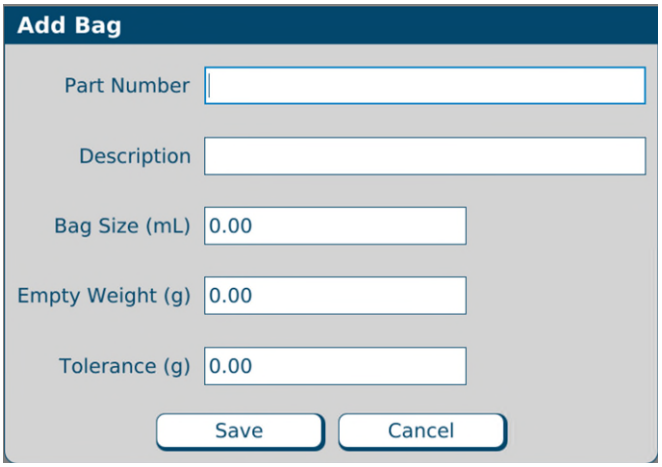
ADDING OR EDITING A BAG

IMPORTANT! Before adding a bag, contact Baxter Technical Support. Refer to Getting Help on Page 20.

1. At the *Bag Inventory* window, do one of these options:

- Tap **Add** to add a new bag.

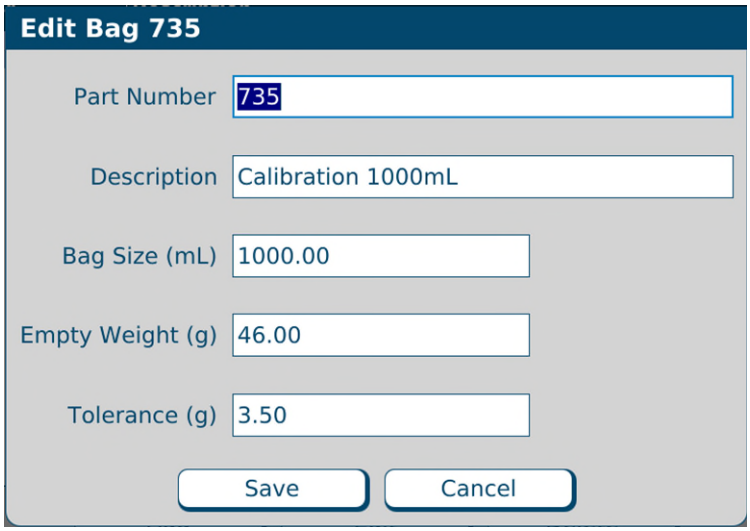
  The *Add Bag* window appears.



Add Bag window

- Select the bag you want to edit, then tap **Edit**.

  The *Edit Bag <name>* window appears.



Edit Bag window

2. At the *Add Bag* window or *Edit Bag <name>* window:

a. Enter:

- Part Number
- Description
- Bag Size
- Empty Weight
- Tolerance

NOTE: You can obtain the empty weight and tolerance of approved bags from Baxter.

b. If you are adding a new bag, enter other information as directed by Baxter.

c. Tap Save.

3. At the *Bag Inventory* window, tap **Close**.

DELETING A BAG

1. At the *Bag Inventory* window:
   a. Select one or more bags you want to delete.
   b. Tap **Delete**.
2. At the *Delete bag <name>?* message, tap:
   - **Yes** to delete the bag
   - **Yes to All** to delete all bags selected in the *Bag Inventory* window

   NOTE: If only one bag is selected, only one will be deleted.

Message

3. At the *Bag Inventory* window, tap **Close**.

USING REPORTS

The compounder offers standard reports that document compounding activity and support various utilities. All reports are formatted for printing on 8.5 x 11 in. (21.6 x 28 cm) paper or on A4 paper size of 29.7 x 21.0 cm (or comparable paper size).

Standard Reports:

Report Name	Available Formats
MixCheck Report	PDF, Text
Authorization Report	PDF
Formula Report	PDF
Log Report	PDF, Excel, Text
Configuration Report	PDF
Formulary Report	PDF, Excel
Product Barcodes Report	PDF
Inlet Barcodes Report	PDF
BlackBox Report	PDF
Calibration Summary Report	PDF
Formula Precision Report	PDF
Ingredient Usage Report	PDF, Excel
Bag Usage Report	PDF, Excel
Flow Factors Report	PDF

Standard Reports

NOTE: To use A4 paper, refer to Printing Options on Page 15.

IMPORTANT! Viewing, printing and exporting reports requires Report permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

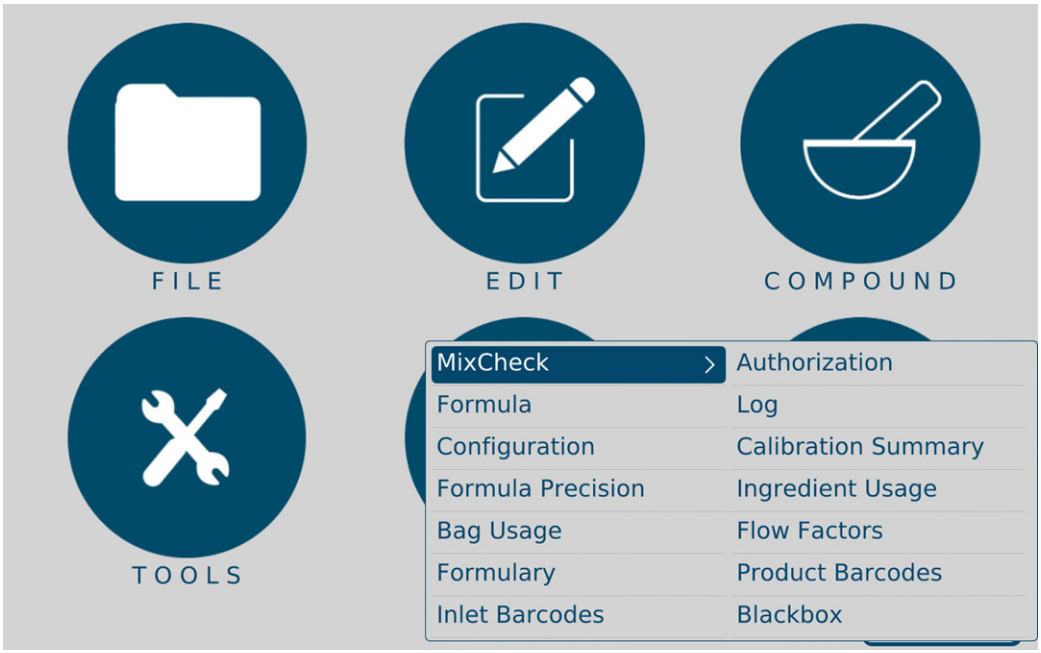
NOTE: To select the printer used for printing reports, refer to Report Printer on Page 106.

To view reports:

1. At the menu screen, select **Reports > Standard**.

Menu screen, Reports menu

2. Select the report you want to view.



Standard reports

3. View the report. Refer to the instructions on the upcoming pages.

   NOTE: The report screen may include scroll bars on the right side and/or the bottom. The top of the report screen may include these navigation options:

   - The print button allows you to send the report to the specified printer.
   - The export icon allows you to save the report to a USB drive.
   - The percentage list controls the zoom.
   - The arrows and the number field allow you to move to different pages of a multi-page report.

4. When you are finished using the report, tap **Exit**.

Navigation options for reports

MIXCHECK REPORT

The MixCheck Report provides details about the compounding process for an order. It reports information including the expected bag weight, measured bag weight, ordered ingredients and volumes, and manual additions that are required. This report can be exported in PDF format.

Customizing MixCheck Reports

IMPORTANT! When using the Use Online MixCheck Authorization, authorization and cosignature authorization of this report require Verification permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.

The following options are available for customizing the MixCheck Report:

- To make this report display and/or print automatically after compounding, and/or allow on-screen authorization, refer to MixCheck Report on Page 101.
- To require a cosigner to authorize the MixCheck Report, refer to Cosignature on Page 108.
- To allow exporting of this report directly to the DoseEdge system, refer to MixCheck Data Export on Page 103.
- To specify signature-related text that you want to include at the end of the report, refer to MixCheck Signature Label on Page 106.

Using MixCheck Reports

WARNING

It is important to print a MixCheck Report for every order, then have a cosigner (pharmacist) view and approve the entire report, especially the **Formula Name**; **Expected Weight**, **Measured Weight** and **Difference**; **Manual Additions**; and **Details**.

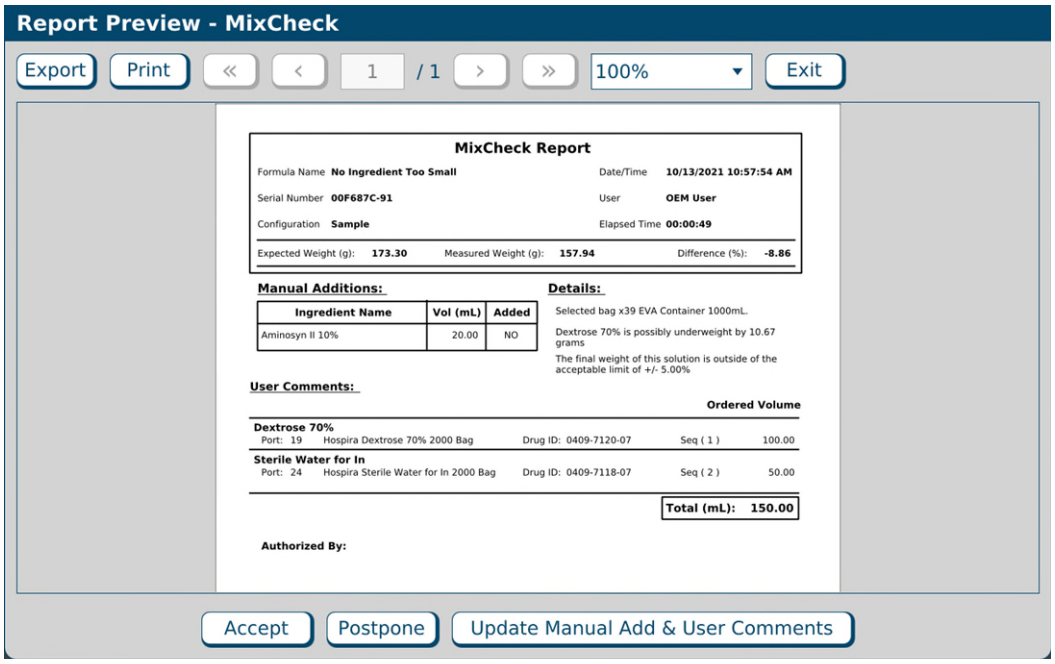
For instructions on viewing and approving the MixCheck Report, refer to the following pages.

Using Online MixCheck Authorization

If “Auto-Display” and “Use Online MixCheck Authorization” are enabled in the options (**Menu > Tools > Options >** *System* tab **>** *MixCheck Report*), the MixCheck report will display automatically on the screen after compounding is completed. Go to step 2(b)**.**

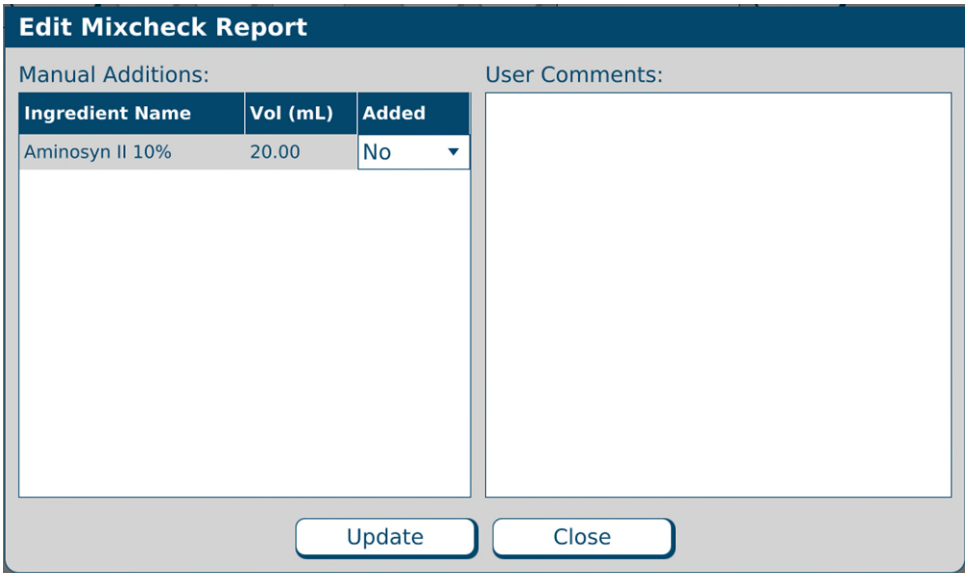
If the Use Online MixCheck Authorization option is enabled, “Review Unauthorized Solutions…” dropdown option is enabled under the MixCheck Report menu option:

1. At the menu screen, tap **Reports > MixCheck > Review Unauthorized Solutions…**
2. At the *Solutions* window:
    a. Select a formula. The *Report Preview – MixCheck* window appears.



MixCheck report preview

    b. Click on **Update Manual Add & User Comments** to verify if all the Manual ingredients have been added by selecting YES/NO adjacent to the listed ingredient and click **Update.**



Update Manual Add & User Comments screen

    c. Tap one of these buttons on the Report Preview screen:
    - **Accept** to authorize the report
    - **Postpone** to save the report for later verification
    - **Print** to send the report to the assigned printer

MixCheck Report

Formula Name **DOE,JANE(5678)** Date/Time **05/31/2023 05:21:27 PM**

Serial Number **1CB881D-100186** User **Administrator**

Configuration **EM2400 CONFIG** Elapsed Time **00:03:02**

Expected Weight (g): **660.43** Measured Weight (g): **657.11** Difference (%): **-0.50**

Manual Additions:

Ingredient Name	Vol (mL)	Added
Infuvite Adult	10.50	
K Chloride 2mEq/mL	7.88	

Details:

Selected bag x39 EVA Container 1000mL.

Container at port 1 exchanged with new container of Baxter Clinolipid 20% 1000 Bag

Container at port 24 exchanged with new container of Baxter Sterile Water for In 2000 Bag

The final weight of this solution is within the acceptable limit of +/- 5.00%

User Comments:

				Ordered Volume
Ca Gluconate 0.465mEq/mL				
Port: 19	Fresenius Kabi Ca Gluconate 0.465mEq/mL 50 Vial	Drug ID: 63323-360-59	Seq (8)	22.58
Clinolipid 20%				
Port: 1	Baxter Clinolipid 20% 1000 Bag	Drug ID: 0338-9540-04	Seq (3)	40.00
Port: 1	Baxter Clinolipid 20% 1000 Bag	Drug ID: 0338-9540-04	Seq (4)	91.25
			Total (mL):	131.25
Dextrose 70%				
Port: 21	Baxter Dextrose 70% 2000 Bag	Drug ID: 0338-0719-06	Seq (5)	210.00
K Phosphate 3mMol/mL PO4				
Port: 6	Hospira K Phosphate 3mMol/mL PO4 15 Vial	Drug ID: 0409-7295-01	Seq (2)	1.75
Na Chloride 4mEq/mL				
Port: 9	APP Pharm Na Chloride 4mEq/mL 30 Vial	Drug ID: 63323-187-30	Seq (1)	2.63
Sterile Water for In				
Port: 24	Baxter Sterile Water for In 2000 Bag	Drug ID: 0338-0013-06	Seq (6)	61.85
Port: 23	Baxter Sterile Water for In 2000 Bag	Drug ID: 0338-0013-06	Seq (7)	150.00
Port: 24	Baxter Sterile Water for In 2000 Bag	Drug ID: 0338-0013-06	Seq (9)	30.00
			Total (mL):	241.85

Total (mL): 610.06

Authorized by:

Serial Number **1CB881D-100186** Page 1 of 1 Date/Time **05/31/2023 05:21:27 PM**

Display Number **D1D2216012**

Sample MixCheck Report

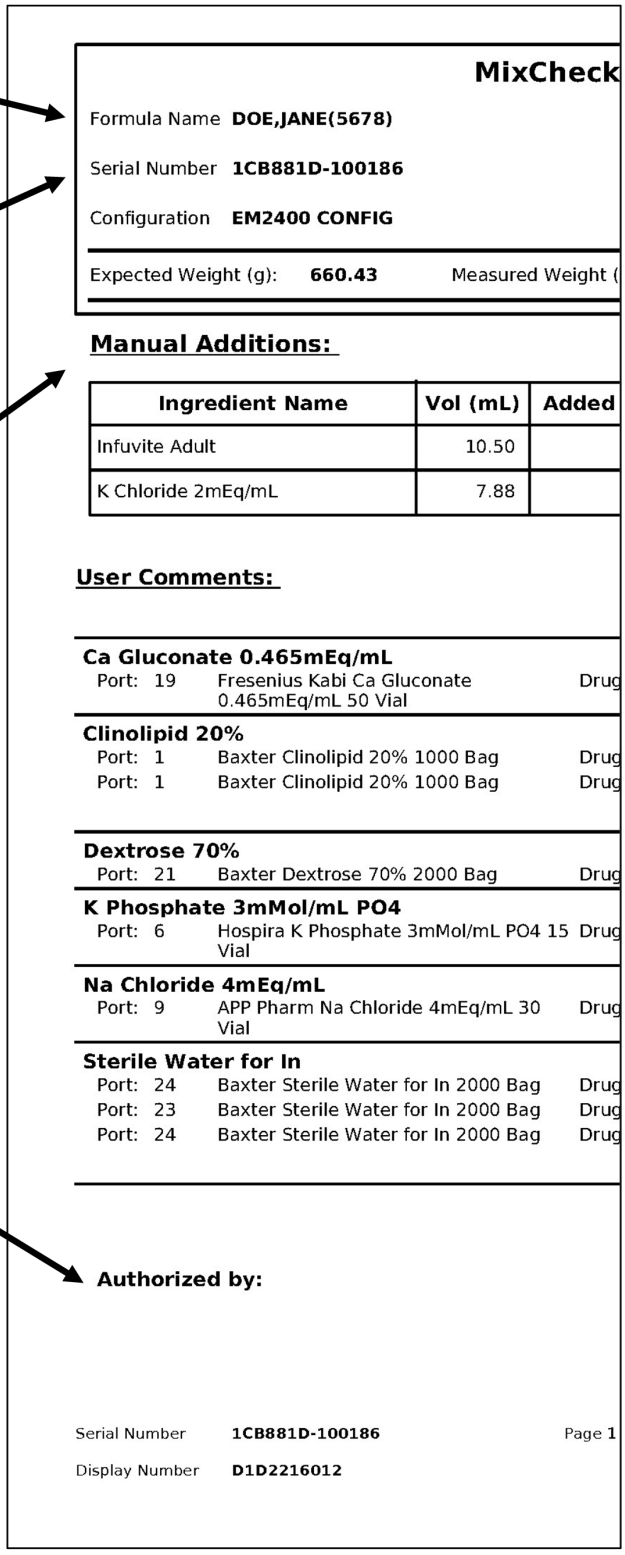
Verify that the **Formula Name** matches the patient name on the label on the patient bag.

Verify that the **Serial Number** (unique for each order) matches the serial number on the label of the patient bag. If the Serial Number of the formula is greater than 36 characters then 36 characters followed by '…' is printed.

If **Manual Additions** are listed:

1. Verify that they match the label on the patient bag and/or the original formula.
2. Add these ingredients to the solution manually.
3. Place your initials in the **Added** column.

In the signature-related section at the end of the report, follow your facility's protocol.



MixCheck

Formula Name **DOE,JANE(5678)**

Serial Number **1CB881D-100186**

Configuration **EM2400 CONFIG**

Expected Weight (g): **660.43** Measured Weight (

Manual Additions:

Ingredient Name	Vol (mL)	Added
Infuvite Adult	10.50	
K Chloride 2mEq/mL	7.88	

User Comments:

Ca Gluconate 0.465mEq/mL
Port: 19 Fresenius Kabi Ca Gluconate 0.465mEq/mL 50 Vial Drug

Clinolipid 20%
Port: 1 Baxter Clinolipid 20% 1000 Bag Drug
Port: 1 Baxter Clinolipid 20% 1000 Bag Drug

Dextrose 70%
Port: 21 Baxter Dextrose 70% 2000 Bag Drug

K Phosphate 3mMol/mL PO4
Port: 6 Hospira K Phosphate 3mMol/mL PO4 15 Vial Drug

Na Chloride 4mEq/mL
Port: 9 APP Pharm Na Chloride 4mEq/mL 30 Vial Drug

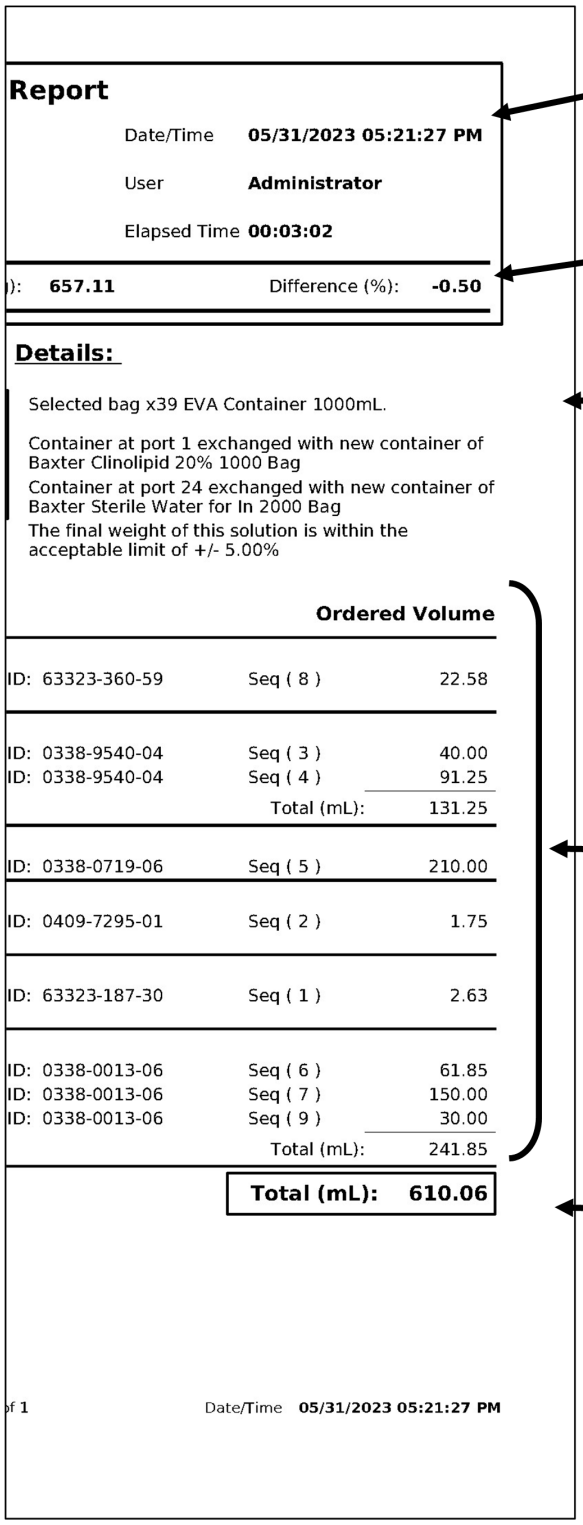
Sterile Water for In
Port: 24 Baxter Sterile Water for In 2000 Bag Drug
Port: 23 Baxter Sterile Water for In 2000 Bag Drug
Port: 24 Baxter Sterile Water for In 2000 Bag Drug

Authorized by:

Serial Number **1CB881D-100186** Page **1**

Display Number **D1D2216012**

Sample MixCheck Report (left side)



Report

Date/Time **05/31/2023 05:21:27 PM**

User **Administrator**

Elapsed Time **00:03:02**

): **657.11** Difference (%): **-0.50**

Details:

Selected bag x39 EVA Container 1000mL.

Container at port 1 exchanged with new container of Baxter Clinolipid 20% 1000 Bag

Container at port 24 exchanged with new container of Baxter Sterile Water for In 2000 Bag

The final weight of this solution is within the acceptable limit of +/- 5.00%

		Ordered Volume
ID: 63323-360-59	Seq (8)	22.58
ID: 0338-9540-04	Seq (3)	40.00
ID: 0338-9540-04	Seq (4)	91.25
	Total (mL):	131.25
ID: 0338-0719-06	Seq (5)	210.00
ID: 0409-7295-01	Seq (2)	1.75
ID: 63323-187-30	Seq (1)	2.63
ID: 0338-0013-06	Seq (6)	61.85
ID: 0338-0013-06	Seq (7)	150.00
ID: 0338-0013-06	Seq (9)	30.00
	Total (mL):	241.85

Total (mL): 610.06

of 1 Date/Time **05/31/2023 05:21:27 PM**

Verify that the **Date/Time** matches the date and time the order was fulfilled.

Compare the **Measured Weight** of the solution to the **Expected Weight**. Verify that the **Difference** is within acceptable limits per your facility's protocol.

Evaluate the information in the **Details** section to verify that the solution was compounded properly. This section lists any interruptions that occurred while compounding, such as ingredient changes, ingredient replacements, occlusions, bubbles, pump pauses, pump door openings and other interruptions.

Verify that each ingredient and its **Ordered Volume** match the label on the patient bag and/or the original formula.

Verify that the **Total (mL)** matches the label on the patient bag and/or the original formula.

NOTE: The Total (mL) does not include the volume of the Manual Additions.

Sample MixCheck Report (right side)

AUTHORIZATION REPORT

The Authorization Report contains information about the compounder setup, including:

- The user who set it up (in the **Assembled** column) and the optional cosigner who performed the verification (in the **Verified** column)

  NOTE: Users can print the report and write their initials in these columns, or the software can be set up to populate these columns automatically.
- The ingredient name, port and inlet used during setup

The following options are available for customizing the Authorization Report:

- To require a cosigner to verify the setup, refer to Cosignature on Page 108.
- To make the **Assembled** and **Verified** columns populate automatically, refer to Authorization Report on Page 101.
- To specify signature-related text that you want to include at the end of the report, refer to Authorization Report Signature Label on Page 106.

You will be able to select a configuration for this report in the select configuration window.

To view the Authorization Report:

1. At the menu screen, tap **Reports > Standard > Authorization**.
2. At the *Select Report Date* window:
   a. Enter the date for the report.
   b. Tap **OK**.
   c. This report can be exported in **PDF** format

Select Report Date window

Authorization History Report

From: **06/01/2023** To: **06/01/2023**

Current user: **Administrator**

Configuration							Completion Date/Time
Port	Ingredient name	Inlet PN	Container (mL)	Remainder (mL)	Assembled	Verified	Date/Time
EM2400 CONFIG							**06/01/2023 05:42:46 AM**
1	Clinolipid 20%	174	1,000	940.00	Administrator	Pharmacist	06/01/2023 05:38:48 AM
6	K Phosphate 3mMol/mL PO4	175	15	9.00	Administrator	Pharmacist	06/01/2023 05:38:58 AM
9	Na Chloride 4mEq/mL	175	30	24.00	Administrator	Pharmacist	06/01/2023 05:39:10 AM
12	Travasol 10%	173	1,000	940.00	Administrator	Pharmacist	06/01/2023 05:39:37 AM
14	Multitrace-5 Concentrate	175	10	4.00	Administrator	Pharmacist	06/01/2023 05:39:52 AM
19	Ca Gluconate 0.465mEq/mL	175	50	44.00	Administrator	Pharmacist	06/01/2023 05:40:03 AM
20	Magnesium Sulfate 4.06mEq	175	50	44.00	Administrator	Pharmacist	06/01/2023 05:41:02 AM
21	Dextrose 70%	173	2,000	1,940.00	Administrator	Pharmacist	06/01/2023 05:40:50 AM
23	Sterile Water for In	173	2,000	1,610.00	Administrator	Pharmacist	06/01/2023 05:40:26 AM
24	Sterile Water for In	173	2,000	1,940.00	Administrator	Pharmacist	06/01/2023 05:41:28 AM

Part Number	Count
173	4
174	1
175	5

Assembled by:_____ Date:_____ Time:_____
Assembled by:_____ Date:_____ Time:_____
Checked by:_____ Date:_____ Time:_____

Print Date/Time 06/01/2023 06:46:47 AM Page 1 of 1

Sample Authorization Report

FORMULA REPORT

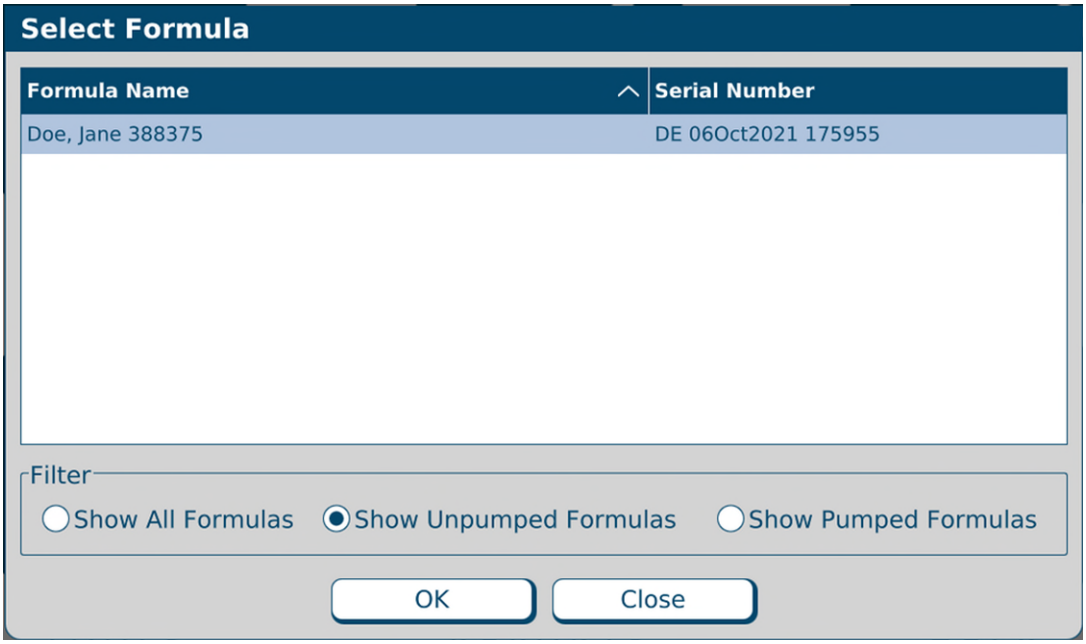
The Formula Report is a summary of a specific formula.

To view the Formula Report:

1. At the menu screen, tap **Reports > Standard > Formula**.
2. At the *Select Formula* window:
   a. Select **Show All Formulas**, or select another filter to reduce the number of formulas displayed.

      NOTE: You can tap **Formula Name** to sort by name or tap **Serial Number** to sort by number.

   b. Select a formula.
   c. Tap **OK**.
   d. This report can be exported in **PDF** format.



Select Formula window

Formula Report

Formula Name : **DOE,JANE(5678)**

Date : **05/31/2023**

Serial Number : **1CB881D-100184**

Time : **04:39:40 PM**

Delivery Count : **2**

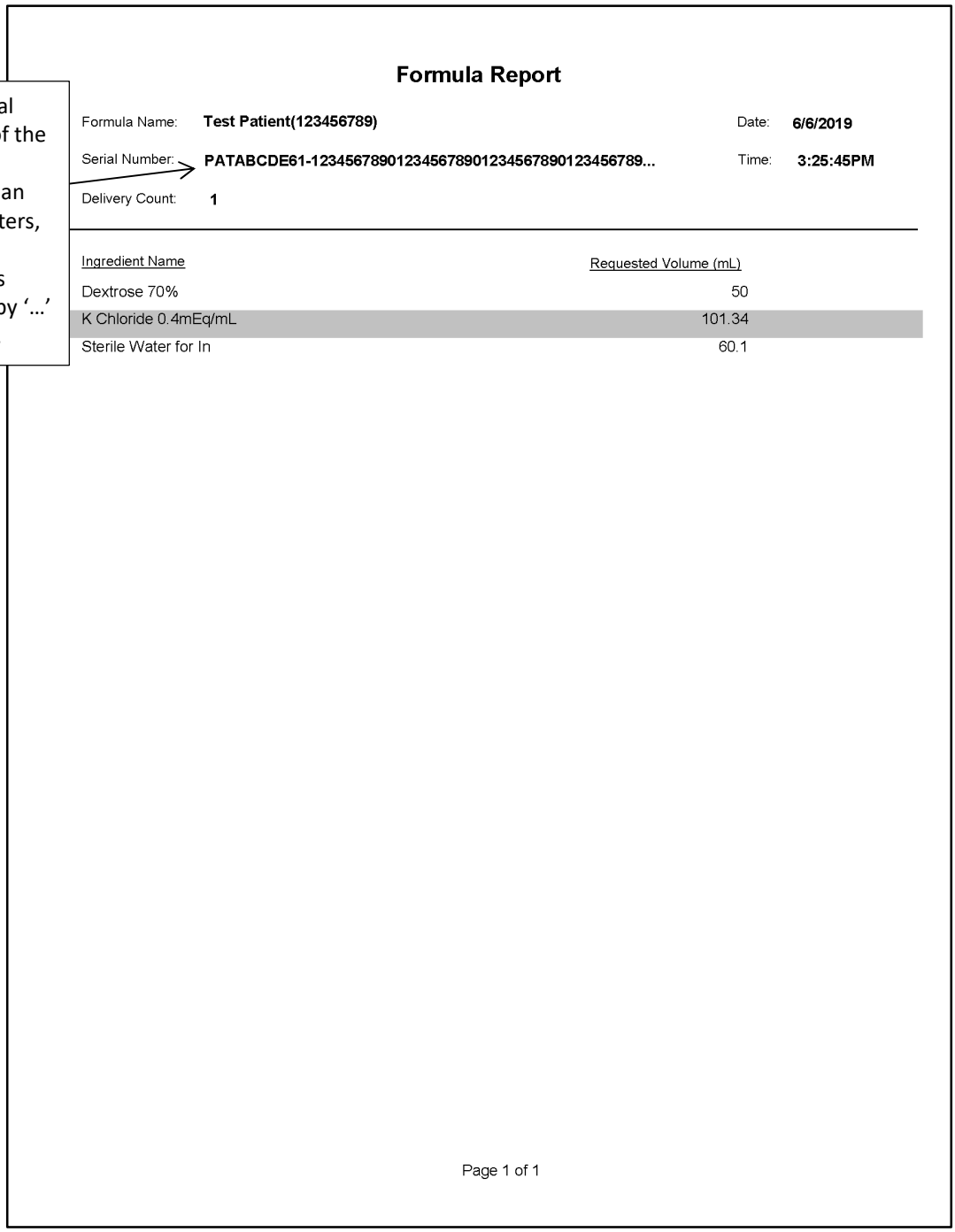
Ingredient Name	Requested Volume (mL)
Ca Gluconate 0.465mEq/mL	22.58
Clinolipid 20%	131.25
Dextrose 70%	210.00
K Phosphate 3mMol/mL PO4	1.75
Magnesium Sulfate 4.06mEq	0.52
Multitrace-5 Concentrate	1.05
Na Chloride 4mEq/mL	2.63
Sterile Water for In	241.85
Travasol 10%	420.00
Infuvite Adult	10.50
K Chloride 2mEq/mL	7.88

Page 1 of 1

Sample Formula Report

If the Serial Number of the formula file contains more than 50 characters, then the Formula Report prints up to 50 characters followed by '…'.

If the Serial Number of the formula is greater than 50 characters, then 50 characters followed by '…' is printed.



Formula Report

Formula Name: **Test Patient(123456789)** Date: **6/6/2019**

Serial Number: **PATABCDE61-12345678901234567890123456789012345678 9...** Time: **3:25:45PM**

Delivery Count: **1**

Ingredient Name	Requested Volume (mL)
Dextrose 70%	50
K Chloride 0.4mEq/mL	101.34
Sterile Water for In	60.1

Page 1 of 1

Sample Formula Report

LOG REPORT

The Log Report is a summary of the formulas that were used for compounding on a specific day.

To view the Log Report:

1. At the menu screen, tap **Reports > Standard > Log**.
2. At the *Select Report Dates* window:
   a. Enter the date for the report.
   b. Tap **OK**.
   c. This report can be exported in **PDF, Excel** and **txt** format

Select Report Dates window

Log Report

Date: 2/9/2018

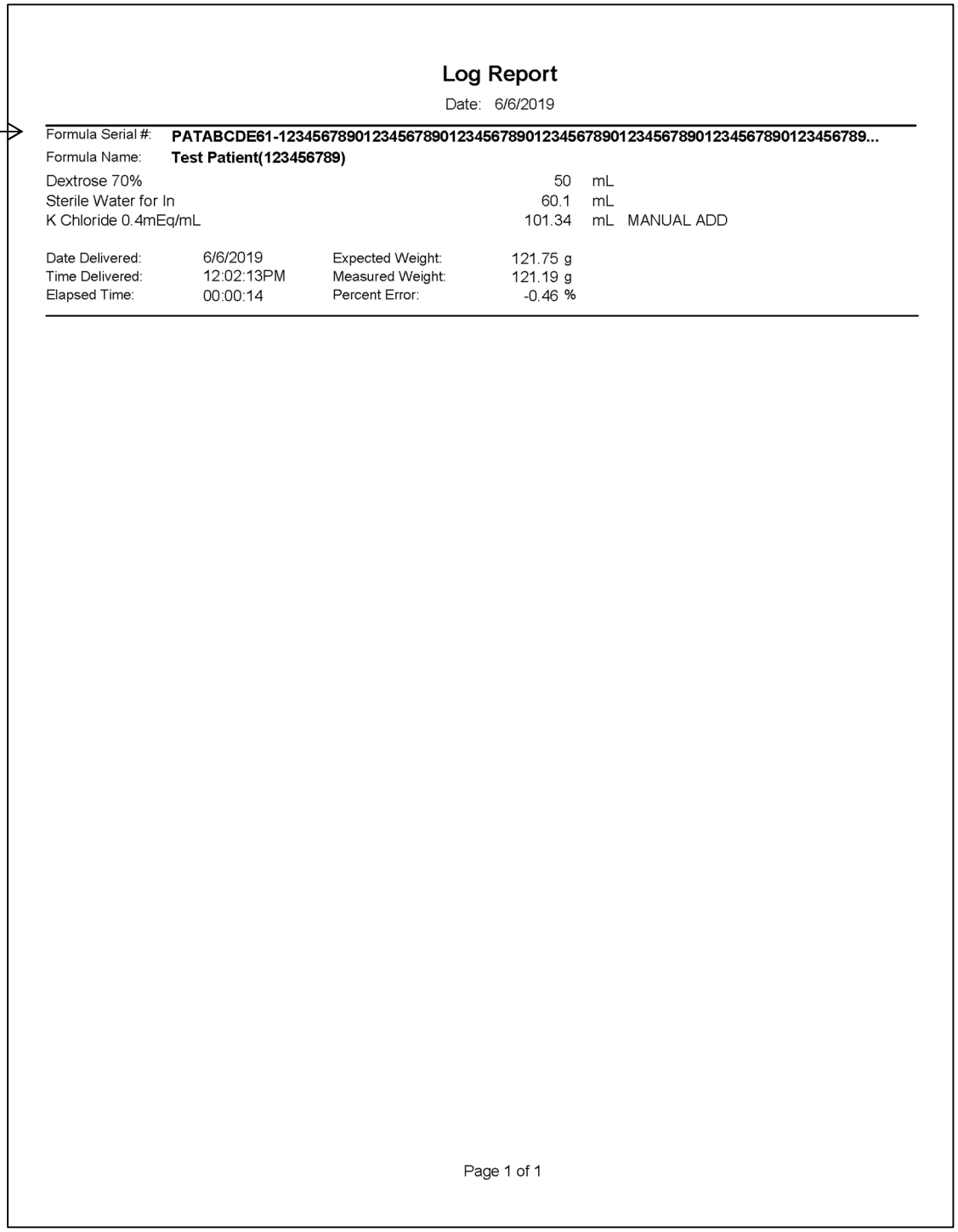
Formula Serial #: **A1FA01E25-100038**		Formula Name:	**LOOEY, BABA(Z123456789AA)**
Dextrose 70%		8.08	mL
K Chloride 0.4mEq/mL		1.64	mL
Sterile Water for In		100	mL
Travasol 10%		0.74	mL
K Chloride 2mEq/mL		88.13	mL MANUAL ADD
Date Delivered:	2/9/2018	Expected Weight:	112.42 g
Time Delivered:	3:18:31PM	Measured Weight:	112.65 g
Elapsed Time:	00:00:13	Percent Error:	0.21 %
Formula Serial #: **A1FA01E41-5984912**		Formula Name:	**DOE, JOHN(5551212)**
Dextrose 70%		30	mL
K Chloride 0.4mEq/mL		35	mL
Sterile Water for In		75.54	mL
Travasol 10%		55	mL
Clinisol 15%		40.08	mL MANUAL ADD
Infuvite Adult		50.64	mL MANUAL ADD
Date Delivered:	2/9/2018	Expected Weight:	205.05 g
Time Delivered:	3:19:58PM	Measured Weight:	205.41 g
Elapsed Time:	00:00:16	Percent Error:	0.18 %

Page 1 of 1

Sample Log Report

If the Serial Number of the formula file contains more than 80 characters, then the Log Report prints up to 80 characters followed by '…'.

If the Serial Number of the formula is greater than 80 characters, then 80 characters followed by '…' is printed.



Log Report

Date: 6/6/2019

Formula Serial #: **PATABCDE61-12345678901234567890123456789012345678901234567890123456789012345678901234567890123456789...**

Formula Name: **Test Patient(123456789)**

Dextrose 70%	50	mL	
Sterile Water for In	60.1	mL	
K Chloride 0.4mEq/mL	101.34	mL	MANUAL ADD

Date Delivered:	6/6/2019	Expected Weight:	121.75 g
Time Delivered:	12:02:13PM	Measured Weight:	121.19 g
Elapsed Time:	00:00:14	Percent Error:	-0.46 %

Page 1 of 1

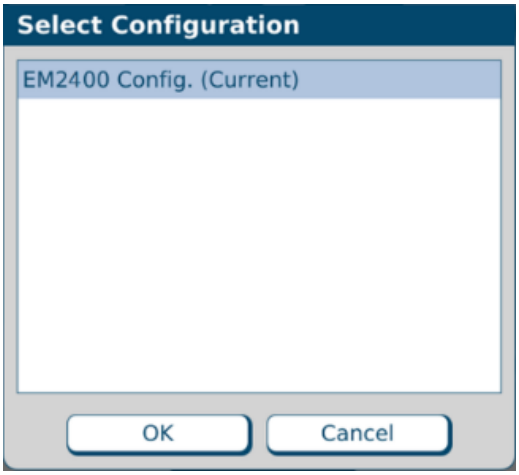
Sample Log Report

CONFIGURATION REPORT

The Configuration Report provides information about a specific configuration.

To view the Configuration Report:

1. At the menu screen, tap **Reports > Standard > Configuration**.
2. At the *Select Configuration* window:
   a. Select the configuration.
   b. Tap **OK**.
   c. This report can be exported in **PDF** format.



Select Configuration window

Configuration Report

Configuration: **EM2400 CONFIG** Date: **01/10/2022**

User: **ADMIN** Time: **03:13:58 pm**

Sequence	Port		Ingredient
1	9		Na Chloride 4mEq/mL
2	10		K Chloride 2mEq/mL
3	7		Na Acetate 2mEq/mL
4	8		K Acetate 2mEq/mL
5	5		Na Phosphate3mMol/mL PO4
6	6		K Phosphate 3mMol/mL PO4
7	4		Infuvite Adult
8	1		Clinolipid 20%
9	Auto-Add	**A**	Travasol 10%
10	11		Clinisol 15%
11	14		Multitrace-5 Concentrate
12	21		Dextrose 70%
13	20		Magnesium Sulfate 4.06mEq
14	23	**U**	Sterile Water for In
14	24	**U**	Sterile Water for In
15	19		Ca Gluconate 0.465mEq/mL

'U' marks the default universal ingredient for this configuration.

'A' marks the allowed Auto Addition for this configuration.

Page 1 of 1

Sample Configuration Report

FORMULARY REPORT

The Formulary Report lists the ingredients that are included in the formulary. Only ingredients that may actually be mounted on the compounder should be in the formulary. This report can be exported in **PDF/Excel** format.

To view the Formulary Report, tap **Reports > Standard > Formulary** at the menu screen.

Formulary Report

Date: **10/4/2021**

Time: **7:37:07 PM**

Ingredient Name / Product Name	Drug ID	Inlet	Sp. Gravity	Availability Size
Addamel N				No
Fresenius Kabi Addamel N 10 Vial	63323-0143-97	751	1.10	10
Aminosyn II 10% SF				No
Hospira Aminosyn II 10% SF 2000 Bag	0409-7172-17	173	1.03	2,000
Aminosyn II 15% SF				No
Hospira Aminosyn II 15% SF 2000 Bag	0409-7171-17	173	1.05	2,000
Aminosyn PF 10%				No
ICU Medical Aminosyn PF 10% 1000 Bag	0990-4179-05	173	1.03	1,000
Aminosyn PF 7%				No
Hospira Aminosyn PF 7% 500 Bag	0409-4178-03	173	1.02	500
Anticoagulant Na Citrate				No
Fenwal Anticoagulant Na Citrate 500 Bag	0942-9504-10	173	1.02	500
Ca Chloride 10%				No
American Regent Ca Chloride 10% 10 Via l	0517-2710-25	175	1.06	10
Ca Gluconate 0.465mE				Yes
Fresenius Kabi Ca Gluconate 0.465mE 10 Vial	63323-360-19	175	1.05	10
Fresenius Kabi Ca Gluconate 0.465mE 10 0 Vial	63323-360-61	175	1.05	100
Fresenius Kabi Ca Gluconate 0.465mE 50 Vial	63323-360-59	175	1.05	50
Cardioplegic Solution				No
Baxter Cardioplegic Solution 1000 Bag	0338-0341-04	173	1.00	1,000
Clinimix 4.25/10				No
Baxter Clinimix 4.25/10 1000 Bag	0338-1134-03	173	1.05	1,000
Baxter Clinimix 4.25/10 2000 Bag	0338-1091-04	173	1.05	2,000
Clinimix 4.25/5				No
Baxter Clinimix 4.25/5 1000 Bag	0338-1133-03	173	1.03	1,000
Baxter Clinimix 4.25/5 2000 Bag	0338-1089-04	173	1.03	2,000
Clinimix 5/15				No
Baxter Clinimix 5/15 1000 Bag	0338-1137-03	173	1.07	1,000
Baxter Clinimix 5/15 2000 Bag	0338-1099-04	173	1.07	2,000
Clinimix 5/20				No
Baxter Clinimix 5/20 1000 Bag	0338-1138-03	173	1.09	1,000
Baxter Clinimix 5/20 2000 Bag	0338-1101-04	173	1.09	2,000
Clinimix 6/5				No
Baxter Clinimix 6/5 1000 Bag	0338-0198-01	173	1.03	1,000

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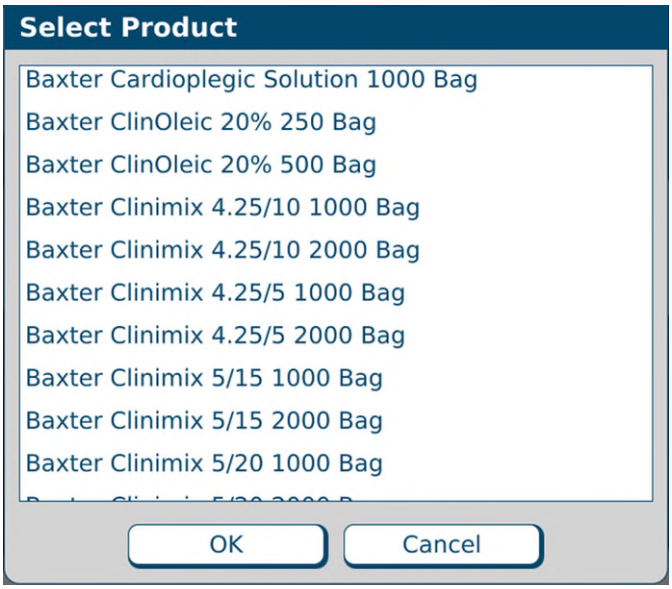
Sample Formulary Report

PRODUCT BARCODES REPORT

The Product Barcodes Report displays the barcodes for products that are in the formulary. You can print the report onto labels for use with products that do not have a manufacturer's barcode.

To view the Product Barcodes Report:

1. At the menu screen, tap **Reports > Standard > Product Barcodes**.
2. At the *Select Product* window:
   a. Select the product.
   b. Tap **OK**.
   c. This report can be exported in **PDF** format



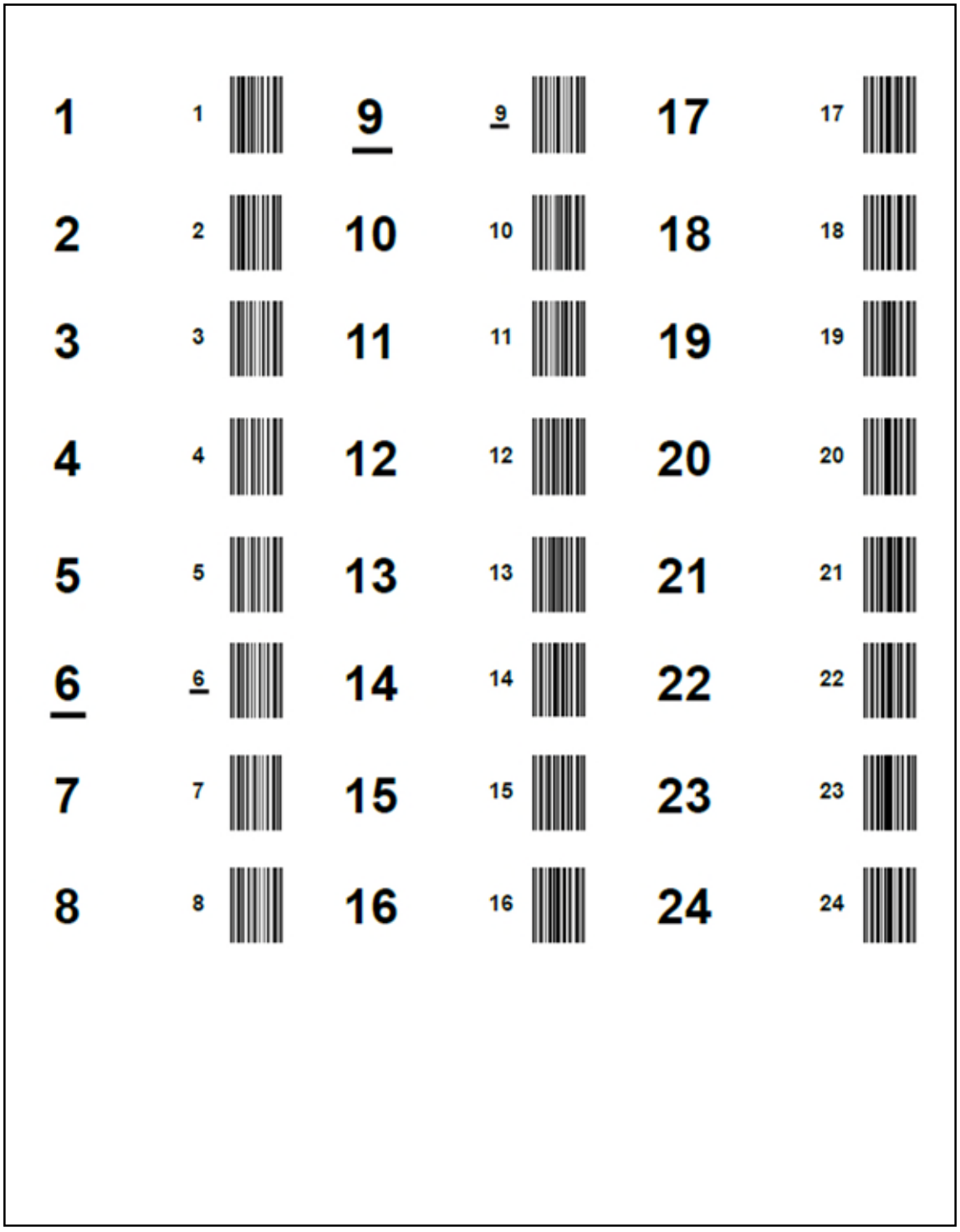
Select Product window

Sample Product Barcodes Report

INLET BARCODES REPORT

The Inlet Barcodes Report displays the barcodes for the inlets. You can print the report onto labels, in case you make a mistake during setup and need an extra barcode label. This report can be exported in **PDF** format.

To view the Inlet Barcodes Report, tap **Reports > Standard > Inlet Barcodes** at the menu screen.



Sample Inlet Barcodes Report

BLACKBOX REPORT

The Blackbox Report is a chronological list of all important system activity for a specific period of time. If necessary, Baxter may use this information for troubleshooting.

NOTE: Exporting the Blackbox report takes several minutes. Baxter recommends doing the export at the end of the day.

To view the Blackbox Report:

1. At the menu screen, select **Reports > Standard > Blackbox**.
2. At the *Enter Begin and End Times* window:
   a. Enter the starting and ending times for the report.
   b. Tap **OK**.
   c. This report can be exported in **PDF** format.

Enter Begin and End Times window

For assistance with reading this report, contact Baxter Technical Support. Refer to Getting Help on Page 20.

BlackBox Report

Entry Date	Entry Time	User Name	Audit Category	Audit Message
12/15/2021	09:29:26 am	SYSTEM	VALVE	Port 17 acutations:0,Port 18 acutations:0,Port 19 acutations:5,Port 20 acutations:2,
12/15/2021	09:29:26 am	SYSTEM	VALVE	Port 21 acutations:2,Port 22 acutations:0,Port 23 acutations:7,Port 24 acutations:10,
12/15/2021	09:29:26 am	SYSTEM	VALVESENT	0x0210
12/15/2021	09:29:26 am	SYSTEM	VALVERCVD	0x0210FE000000
12/15/2021	09:29:26 am	SYSTEM	SCALESENT	0x0301
12/15/2021	09:29:26 am	SYSTEM	SCALERCVD	0x0301
12/15/2021	09:29:27 am	SYSTEM	SCALESENT	0x0302
12/15/2021	09:29:27 am	SYSTEM	SCALERCVD	0x0302015363616C6530323134
12/15/2021	09:29:27 am	SYSTEM	SCALE	FirmwareID: Scale0214
12/15/2021	09:29:27 am	SYSTEM	SCALE	CompounderScaleMain::ScaleSequenceDone
12/15/2021	09:29:27 am	SYSTEM	SCALESENT	0x0311
12/15/2021	09:29:27 am	SYSTEM	SCALERCVD	0x031100A08D1922
12/15/2021	09:29:27 am	SYSTEM	BELLSENT	0x0901
12/15/2021	09:29:27 am	SYSTEM	BELLRCVD	0x0901
12/15/2021	09:29:29 am	SYSTEM	BELLSENT	0x0902
12/15/2021	09:29:29 am	SYSTEM	BELLRCVD	0x090201415544494F30343134
12/15/2021	09:29:29 am	SYSTEM	BELL	FirmwareID: AUDIO0414
12/15/2021	09:29:29 am	SYSTEM	GUI	GUIRESPINIT status is 0 and 0}]tatus":false}]tusMessage":"Request processing got failed"}]s":0}]:1}]ome ready. "}}]
12/15/2021	09:30:16 am	SYSTEM	SECURITY	LOGON attempted by password: Username admin (Password is empty)
12/15/2021	09:30:16 am	SYSTEM	SECURITY	LOGIN FAILED: Username admin
12/15/2021	09:30:37 am	SYSTEM	GUIINTERFACE	GetGroupNameByLoginName Error in UserGroupListModel
12/15/2021	09:30:37 am	SYSTEM	GUI	["maa.login",48, {"LoginName":"ADMIN","password":"********"}]
12/15/2021	09:30:37 am	SYSTEM	MODEANDACCESS	LOGON attempted by password: ADMIN
12/15/2021	09:30:37 am	SYSTEM	Database	Opened database: /var/persist/database/em2400.db
12/15/2021	09:30:37 am	SYSTEM	CompDB	Configure SQLite busy timeout as 30000 ms -> Succeeded
12/15/2021	09:30:40 am	SYSTEM	CompDB	SQLITE rollback method set as WAL
12/15/2021	09:30:40 am	SYSTEM	MODEANDACCESS	LOGON successful for ADMIN
12/15/2021	09:30:40 am	ADMIN	GUI	REQUESTED TO ENABLE USB AFTER USER LOGIN
12/15/2021	09:30:40 am	ADMIN	USB	Enum: Attached Mass Storage (vid: 5118, pid: 16675, iclass: 8, isub-class: 6, iprotocol: 80)
12/15/2021	09:30:40 am	ADMIN	USB	Check device Mass Storage attached: Attached
12/15/2021	09:30:40 am	ADMIN	GUI	Mass storage is attached and enabling it.
12/15/2021	09:30:40 am	ADMIN	USB	Enable mass storage driver: ENABLED
12/15/2021	09:30:40 am	ADMIN	GUI	USB mass storage hot-plugin events has been subscribed.
12/15/2021	09:30:40 am	ADMIN	USB	Hotplugin monitoring thread started.
12/15/2021	09:30:40 am	ADMIN	USB	Subscription (Mass Storage: Attached) is completed.
12/15/2021	09:30:40 am	ADMIN	USB	Subscription (Mass Storage: Detached) is completed.
12/15/2021	09:30:40 am	ADMIN	GUI	Barcode reader hot-plugin events has been subscribed.
12/15/2021	09:30:40 am	ADMIN	USB	Subscription (Barcode Reader: Attached) is completed.
12/15/2021	09:30:40 am	ADMIN	USB	Subscription (Barcode Reader: Detached) is completed.
12/15/2021	09:30:40 am	ADMIN	GUI	HLA configurations: serial num = D1D2138037, mfg date = 24/09/2021
12/15/2021	09:30:40 am	ADMIN	GUI	Formula files directory configured with USB path

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Sample Blackbox Report

CALIBRATION SUMMARY REPORT

The Calibration Summary Report summarizes the calibration processes for the pump and the load cell during a specific period of time. It also distinguishes between automatic and manual calibrations.

To view the Calibration Summary Report:

1. At the menu screen, tap **Reports > Standard > Calibration Summary**.
2. At the Select Report Dates window:
   a. Enter the First and Last dates for the report.
      NOTE: The available dates are still limited by the amount of time this information is stored. For more information, refer to Storage on Page 103.
   b. Tap **OK**.
   c. This report can be exported in **PDF** format.

Select Report Dates window

Calibration Summary

Pump Calibration

From: **6/27/2017** To: **6/27/2017**

Time	Type	Result			
User		Cal Product		Port	Volume
6/27/2017					
3:30:04AM	Auto-adjustment		Succeeded		
Administrator		0338-0013-29		24	602.24
3:30:37AM	Manual using load cell		Succeeded		
Administrator		0338-0013-29		24	200.00

Load Cell Calibration

Time	User	Result
6/27/2017		
2:52:34AM	Administrator	Succeeded

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Sample Calibration Summary Report

FORMULA PRECISION REPORT

The Formula Precision Report summarizes the precision of the compounding process (how accurately the actual weight matched the expected weight) during a specific period of time.

To view the Formula Precision Report:

1. At the menu screen, tap **Reports > Standard > Formula Precision**.
2. At the Select Report Dates window
   a. Enter the First date and Last dates for the report.
      NOTE: The available dates are still limited by the amount of time this information is stored. For more information, refer to Storage on Page 103.
   b. Select **Acceptable Weight Variance (%)** from the drop-down list.
   c. Tap **OK**.
   d. This report can be exported in **PDF** format.

Select Report Dates window

Formula Precision Summary

From: **12/22/2021** To: **12/22/2021**

Acceptable Weight Variance: **- 5.00% to 5.00%**

Serial Number	Formula Name	Delivered	User	Expected (g)	Measured (g)	%Variance
12/22/2021						
A1FA01E32-5984912	DOE, JOHN(5551212)	1:00:52PM	Administrator	194.83	193.88	-0.49

Summary:

	Number of bags
-5% + variance	**0**
-4% to -4.99% variance	**0**
-3% to -3.99% variance	**0**
-2 % to -2.99% variance	**1**
-1% to -1.99% variance	**1**
-0.01% to -0.99% variance	**1**
0% to 0.99% variance	**1**
1% to 1.99% variance	**0**
2% to 2.99% variance	**0**
3% to 3.99% variance	**0**
4% to 4.99% variance	**0**
5% + variance	**0**
Total Bags	**4**
Bags within range	**4**
Bags out of range	**0**

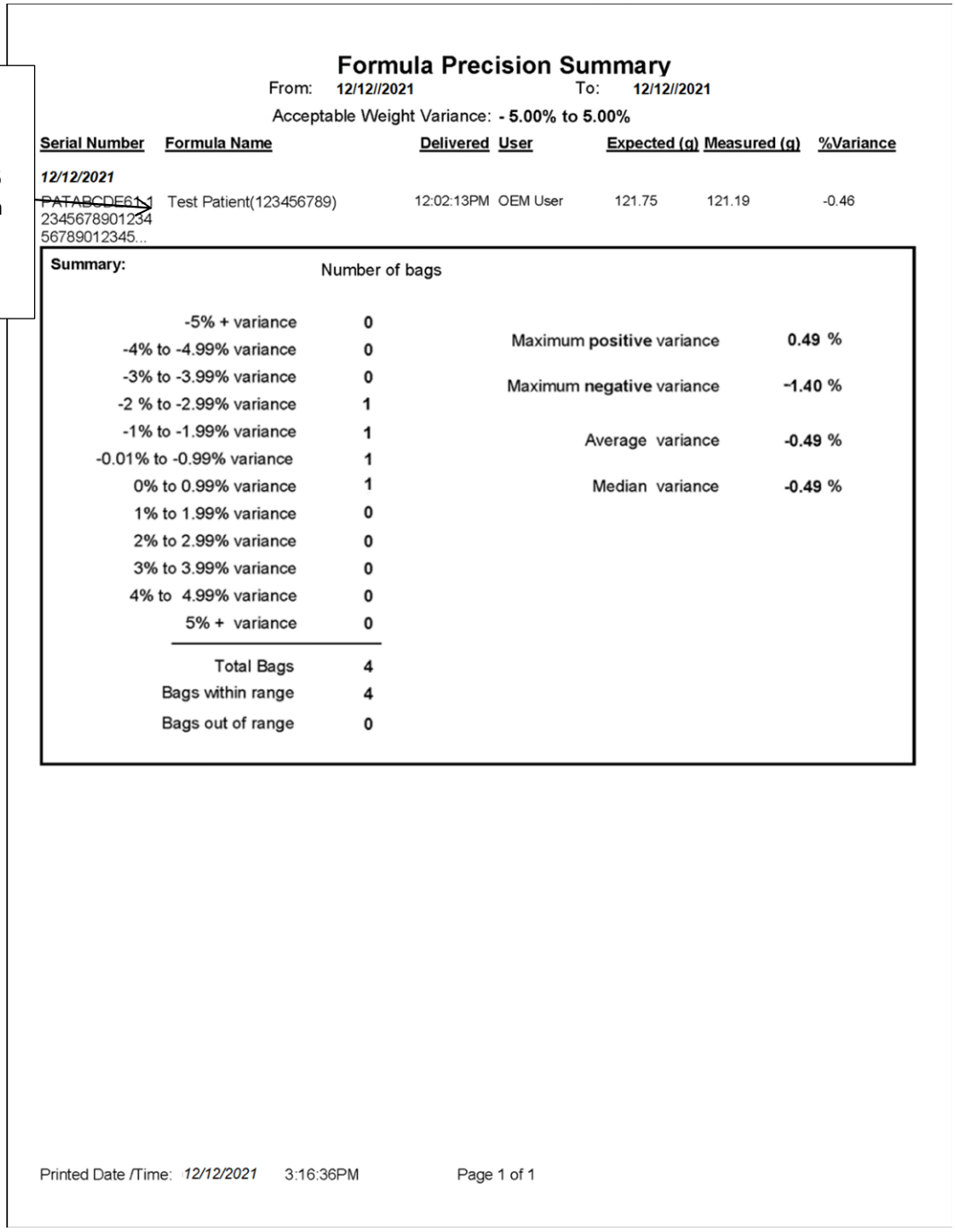
Maximum **positive** variance	**0.49** %
Maximum **negative** variance	**-1.40** %
Average variance	**-0.49** %
Median variance	**-0.49** %

Printed Date /Time: 12/22/2021 1:02:37PM Page 1 of 1

Sample Formula Precision Report

If the Serial Number of the formula file contains more than 36 characters, then the Formula Precision Report prints up to 36 characters followed by '…'.

If the Serial Number of the formula is greater than 36 characters then 36 characters followed by '…' is printed.



Formula Precision Summary

From: **12/12//2021** To: **12/12//2021**

Acceptable Weight Variance: **- 5.00% to 5.00%**

Serial Number	Formula Name	Delivered	User	Expected (g)	Measured (g)	%Variance
12/12/2021						
~~PATABCDE61~~ 2345678901234 56789012345...	Test Patient(123456789)	12:02:13PM	OEM User	121.75	121.19	-0.46

Summary:

	Number of bags
-5% + variance	0
-4% to -4.99% variance	0
-3% to -3.99% variance	0
-2 % to -2.99% variance	1
-1% to -1.99% variance	1
-0.01% to -0.99% variance	1
0% to 0.99% variance	1
1% to 1.99% variance	0
2% to 2.99% variance	0
3% to 3.99% variance	0
4% to 4.99% variance	0
5% + variance	0
Total Bags	4
Bags within range	4
Bags out of range	0

Maximum **positive** variance	**0.49 %**
Maximum **negative** variance	**-1.40 %**
Average variance	**-0.49 %**
Median variance	**-0.49 %**

Printed Date /Time: *12/12/2021* 3:16:36PM Page 1 of 1

Sample Formula Precision Report

INGREDIENT USAGE REPORT

The Ingredient Usage Report summarizes the ingredient usage during a specific period of time. This report is used to manage inventory.

To view the Ingredient Usage Report:

1. At the menu screen, select **Reports > Standard > Ingredient Usage**.
2. At the *Select Report Dates* window:
   a. Enter the First and Last date for the report.
   b. Tap **OK**.
   c. This report can be exported in **PDF/Excel** format.

Select Report Dates window

Ingredient Usage

From: 2/20/2018 To: 2/20/2018

Ingredient Name		Volume Used (ml)	Containers
Formulary Ingredients			
Dextrose 70%		**30.00**	
Baxter Dextrose 70% 2000 Bag	0338-0719-06	30.00	1
K Chloride 0.4mEq/mL		**35.00**	
Baxter K Chloride 0.4mEq/mL 50 Bag	0338-0703-41	35.00	1
Sterile Water for In		**75.54**	
Baxter Sterile Water for In 5000 Bag	0338-0013-29	75.54	1
Travasol 10%		**55.00**	
Baxter Travasol 10% 1000 Bag	0338-0644-04	55.00	1
Manual Add Ingredients			
Clinisol 15%		**40.08**	
Infuvite Adult		**50.64**	

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Sample Ingredient Usage Report

BAG USAGE REPORT

The Bag Usage Report summarizes the bag usage during a specific period of time. This report is used to manage inventory.

To view the Bag Usage Report:

1. At the menu screen, tap **Reports > Standard > Bag Usage**.
2. At the *Select Report Dates* window:
   a. Enter the First and Last date for the report.
   b. Tap **OK**.
   c. This report can be exported in **PDF/Excel** format.

Select Report Dates window

Bag Usage

2/20/2018 --- 2/20/2018

Part Number	Description	Number Used
x39	EVA Container 1000mL.	1
	Total:	1

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Sample Bag Usage Report

FLOW FACTORS REPORT

The Flow Factors Report lists the flow factors for all the ingredients in the current configuration.

To view the Flow Factors Report, tap **Reports > Standard > Flow Factors** at the menu screen.

You will be able to select a specific configuration or all configurations on the screen for the Flow Factors Report. This report can be exported in **PDF** format.

NOTE: You do not need to view this report unless directed by Baxter Technical Support.

Flow Factors

Configuration: Sample

Date: 05/31/2023

Time: 04:40:23 PM

Port	Seq	Product Name	Min Vol (mL)	Max Vol (mL)	Flow Factor
19	1	ICU Medical Dextrose 70% 2000 Bag			
			0.00	5.00	**0.987**
			5.00	12.50	**0.996**
			12.50	12,000.00	**1.022**
24	2	ICU Medical Sterile Water for In 2000 Bag			
			0.00	5.00	**0.993**
			5.00	12.50	**0.964**
			12.50	12,000.00	**0.997**

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Sample Flow Factors Report

CUSTOM REPORTS

The custom reports can be created for your facility for a fee. For more information on custom reports, contact Baxter Technical Support. Refer to Getting Help on Page 20.

To view custom reports, select **Reports > Custom Reports**.

Menu screen, Reports menu

TROUBLESHOOTING

HANDLING INTERRUPTIONS AND ERRORS

If you encounter any of these interruptions or errors, take the suggested actions. If the issue persists, contact Baxter Technical Support. Refer to Getting Help on Page 20.

Issues with the Barcodes

Issue / On-screen Text	Explanation	Suggested Actions
The label on the source container cannot be scanned. Text: **Unable to scan**	The barcode on the source container is not legible.	1. Check that the barcode on the source container is legible. 2. Follow the process to print the barcode through the ExactaMix software. Refer to Product Barcodes Report on Page 183.
The label on the source container cannot be scanned. Text: **Not in Formulary**	The ingredient is not in the formulary.	1. Check that the barcode on the source container is legible. 2. Check that the **Barcode ID** in the formulary is correct. Refer to Adding or Editing a Product on Page 148. 3. If the ingredient is not in the formulary, add the ingredient. Refer to Adding or Editing an Ingredient on Page 145.
The label on the patient bag cannot be scanned.	The barcode scanner is not operational.	1. Check that the green LED on the barcode scanner illuminates when you scan a barcode. • If the LED does not illuminate, check that the cable for the barcode scanner is connected properly to the display. • If the LED illuminates, reboot the compounder. Refer to Rebooting and Shutting Down on Page 32. 2. Check that the barcode scanner and its cable are not damaged. 3. Contact Baxter Technical Support. Refer to Getting Help on Page 20.
No barcodes can be scanned.	The barcode scanner is not operational.	1. Disconnect the cable for the barcode scanner from the display, then reconnect this cable. 2. Check that the barcode scanner and its cable are not damaged. 3. If the cables for the keyboard and mouse are connected to the display, disconnect these cables. Then reboot the compounder. Refer to Rebooting and Shutting Down on Page 32. 4. Contact Baxter Technical Support for a barcode programming sheet. Refer to Getting Help on Page 20.

Issue / On-screen Text	Explanation	Suggested Actions
Text: **Unable to retrieve formula for scanned barcode <Formula File Name> from the formula file directory <formula file directory>. There may be an issue with network connectivity, please reboot the compounder.** **If the problem persists, please contact Baxter Technical Support**	The .PAT /.FRM file is not available.	1. Verify the .PAT/.FRM name exists in the Pat file share. If not, correct the .PAT/.FRM file in the order entry software, then print and scan a new barcode label. 2. Check that the Ethernet cable is connected properly to both the display and the order-entry computer. 3. Check that the network is functioning. 4. Reboot the compounder. Refer to Rebooting and Shutting Down on Page 32. 5. Check the path on both the order-entry computer and the compounder. Refer to Setting Up the Directories Options on Page 109.
Text: **2D Formula Barcode serial number (X) does not meet current Order Entry specification and cannot be loaded.**	The 2D Formula Barcode serial number does not meet the Order entry specification	1. Correct the serial number of the 2D Formula Barcode, then print and scan the new 2D Formula Barcode.
Text: **The following formula name or data is not supported.** **Contact the Order Entry System Administrator.** **Content: "%s"**	The 2D Formula Barcode does not meet the Order entry specification	1. Correct the content of the 2D Formula Barcode, then print and scan the new 2D Formula Barcode.
Text: **2D Formula Barcode serial number format (X) does not meet the current configured maximum serial number length. Refer to security tab in options screen or contact the Order Entry systems.**	2D Formula Barcode serial number format (X) does not meet the configured maximum serial number length, set in options screen → security tab. The serial number length should be less than or equal to the value specified in the security tab.	Do one of the following: • Correct the length of the serial number of the 2D Formula Barcode (Maximum up to the value specified in the security tab), then print and scan the new 2D Formula Barcode • Increase the serial number length value in the options screen→security tab, such that the serial number length available in the 2D Formula Barcode is lesser than or equal to the configured value in security tab.

Issue / On-screen Text	Explanation	Suggested Actions
Text: **2D Formula Barcode contains the following errors. So 2D Formula Barcode (X) cannot be loaded.** **1) Following Ingredient ID(s) exceeds the maximum characters (20).** **(%s)** **You must correct the Ingredient ID(s) then load the formula.**	The 2D Formula Barcode contains ingredient(s) whose Ingredient ID(s) exceeds the maximum allowable characters (20).	1. Correct the length of the Ingredient ID, it must not exceed 20 characters. 2. Print the 2D Formula Barcode and scan the new 2D Formula Barcode.
Text: **2D Formula Barcode contains the following errors. So 2D Formula Barcode (X) cannot be loaded.** **1) Following manual Ingredient Name(s) exceeds the maximum characters (25).** **(%s)** **You must correct the manual Ingredient Name(s) then load the formula.**	The 2D Formula Barcode contains ingredient(s) whose ingredient name(s) exceeds the maximum allowable characters (25).	1. Correct the length of the Ingredient Name, it must not exceed 25 characters. 2. Print the 2D Formula Barcode and scan the new 2D Formula Barcode.
Text: **2D Formula Barcode contains the following errors. So 2D Formula Barcode (X) cannot be loaded.** **1) Following Ingredient Volume(s) does not meet the format (####.##).** **(%s)** **You must correct the Ingredient Volume(s) format then load the formula.**	The 2D Formula Barcode contains ingredient(s) whose ingredient volume does not meet the format (####.##).	1. Correct the format of the Ingredient Volume, it must be of the format (####.##). 2. Print the 2D Formula Barcode and scan the new 2D Formula Barcode.

Issue / On-screen Text	Explanation	Suggested Actions
Text: **2D Formula Barcode contains the following errors. So 2D Formula Barcode (X) cannot be loaded.** **Ingredient (%s) appears multiple times, with volume (%d1) and volume(%d2)**	The 2D Formula Barcode contains same ingredients appearing multiple times whose volumes are different.	1. Correct the Ingredient names having the same ingredient name multiple times. 2. Print the 2D Formula Barcode and scan the new 2D Formula Barcode.
Text: **Barcode scanner (X): barcode contains an invalid Code 39 character.**	The barcodes for formulas must use the Code39 symbology, which has a restricted character set.	1. Reprint the barcode. 2. Scan the barcode again.
Text: **Barcode scanner (X): barcode contains an invalid MOD43 check digit.**	The barcodes for formulas must use the Code39 symbology with a MOD43 check digit appended.	1. Reprint the barcode. 2. Scan the barcode again.
Text: **Barcode scanner (X): invalid barcode or formula not available.**	The barcode that was scanned does not match a formula.	1. Check that the network settings are correct. 2. Check that the Ethernet cable is connected properly to both the display and the order-entry computer. 3. Check the database to ensure that the formula exists.

Issues with the Scanner Holder

Issue / On-screen Text	Suggested Actions
Barcode scanner holder is loose and moves when picking up or putting back the scanner	Use an Allen wrench or Hex key (2mm) to tighten the two screws that secure the barcode scanner holder to the back of the display. If problem persists, please contact Baxter Technical Support.
Barcode scanner holder is broken	Contact Baxter Customer Service to get a new scanner holder. For contact details, refer to Help.
Missing Barcode scanner holder	Contact Baxter Customer Service to get a new scanner holder. For contact details, refer to Getting Help on Page 20.

Issues with the Display Cable

Issue / On-screen Text	Suggested Actions
The display cable cannot be connected to the display	Make sure the smaller connector end of the cable is being used to plug into the display module. See the photos on Page 24. If problem persists, please contact Baxter Technical Support.
The display cable cannot be connected to the main module	Make sure the larger connector end of the cable is being used to plug into the main module. See the photos on Page 24. If problem persists, please contact Baxter Technical Support.
The display cable is damaged (connectors and/or insulation)	Contact Baxter Technical Support to get a display cable. For contact details, refer to Getting Help on Page 20.
Display has power but is not communicating with the main module	Make sure the display cable connections are not loose. If problem persists, please contact Baxter Technical Support.

Issues with the Formulas, Ingredients and Configurations

Issue / On-screen Text	Explanation	Suggested Actions
Text: **This formula contains <*ingredient name*>, which is not currently on the configuration. Do you wish to add it to the configuration?**	The ingredient is an auto-addition ingredient.	Add the ingredient. Refer to Performing an Auto-Addition on Page 89.
Text: **Configuration must be verified before compounding.**	The configuration is not primed and verified.	Prime and verify the configuration. Refer to Priming and Verifying on Page 54.
Text: **The following ports contain products that have been spiked longer than allowed. Port Product Time Spiked Allowed Hang Time (Hours) <*list of products*>.**	One or more ingredients are expired.	1. Tap **Cancel**. 2. Check the expiration dates of all the ingredients. 3. Change the container of each expired ingredient.
Text: **Ingredient <*ingredient name*> must be manually added and its requested volume of <*requested volume*> mL exceeds the maximum manual add volume of <*max manual add volume*> mL.**	The ordered volume of the product exceeds the maximum volume for manual additions.	1. Tap **Cancel**. 2. Check that the **Drug ID** is correct and that it matches the Drug ID number from the order-entry software. Refer to Adding or Editing a Product on Page 148.
Text: **Manual Add**	The product is not included in the configuration, or its ordered volume is less than 0.2 mL.	Add the product manually. Refer to Performing a Manual Addition on Page 84.
	The product is included in the physical configuration, and its ordered volume is at least 0.2 mL, but it does not match any products in the software configuration.	Check that the **Drug ID** is correct and that it matches the Drug ID number from the order-entry software. Refer to Adding or Editing a Product on Page 148.
Text: **Swap Container: Your container of <*ingredient name*> is empty. You have <*remaining volume*> mL left to run. Please change the container now.**	The container is almost empty and needs to be replaced.	Check that the container is almost empty. • If the container is almost empty, replace it. Refer to Replacing a Source Container on Page 82. • If the container is not almost empty, check that it is the correct container, and contact Baxter Technical Support. Refer to Getting Help on Page 20.

Issue / On-screen Text	Explanation	Suggested Actions
The **OK** button is not active on the *Hang Source Containers* screen, and the ingredient buttons do not change to a blue color.	The ingredient detail windows have not been viewed.	Tap each ingredient button to view the details. Refer to Attaching the New Ingredients and Inlets on Page 45.
During priming, the fluid does not flow through the expected inlet.	The inlet is not attached to the proper port.	1. Remove the source container from the vial rack or hanger and turn it right-side-up, to prevent fluid from flowing. 2. Remove the inlet from the incorrect port and attach it to the correct port. 3. Return the source container to the vial rack or hanger.
Text: **Formula Conflict:** **Formula contains incompatible ingredients with insufficient flush volume between them.** **First Ingredient: <*ingredient name*>** **Second Ingredient: <*ingredient name*>** **Required Flush: <*required volume*>** **Available Flush: <*available volume*>**	There is not enough ingredient flush between incompatible ingredient groups.	1. Tap **Cancel**. 2. Verify ordered volume of flush ingredient is correct. If not, re-enter order. 3. Contact Baxter Technical Support. Refer to Getting Help on Page 20.

Issue / On-screen Text	Explanation	Suggested Actions
Text: **Formula Conflict: Additional <*flush volume*> mL of <*Universal Ingredient*> required for flush.**	The formula does not contain the minimum required Universal Ingredient.	**WARNING** If you choose to **Increase Ingredient Volume**, the clinical impact should be considered. This option increases the volume in the bag and is not part of the original order. Increasing the Universal Ingredient volume may change the overall formula ordered. Consult a pharmacist before compounding. • Tap **Change UI To…** to change the Universal Ingredient to one that has the minimum volume required and does not have flush ingredient, without increasing the ordered volume. Then tap **OK** and continue with the steps below. **WARNING** A calibration bag must be used during all Universal Ingredient flushes. You must replace the original patient bag with a calibration bag for the flush, then reattach the original patient bag. If this is not done, the patient bag could contain an unintended volume and/or ingredient. 1. If a patient bag is attached, remove it. Refer to Removing the Patient Bagon Page 75. 2. Change the Universal Ingredient. Refer to Changing the Universal Ingredient on Page 97, starting at Step 2. 3. Attach the patient bag. Refer to Attaching the Patient Bag on Page 71. 4. Repeat the compounding process.

Issue / On-screen Text	Explanation	Suggested Actions
Text: **The requested product <product name> cannot be added to the configuration as the flow factors are not set up for the associated inlet <inlet name>.** **Please confirm the correct inlet is associated for this product or enter the correct flow factors for the requested product and associated Inlets.** **Contact Baxter Technical Support for help**	All ingredients need flow factors prior to compounding.	1. Tap **OK** on the error message. 2. Contact Baxter Technical Support for adding/updating flow factors.
Text: **Formula cannot be pumped. The following Products** **contain invalid flow factors:** **<list of products>** **Please contact Baxter Technical Support to obtain the** **correct flow factors and for help to enter them into the Formulary.**	All ingredients need flow factors prior to compounding.	1. Tap **OK** on the error message. 2. Contact Baxter Technical Support for adding/updating flow factors.

Issues with the Calibration

On-screen Text	Explanation	Suggested Actions
Load cell not calibrated. Must calibrate to continue.	The load cell is not calibrated.	1. Tap **Yes**. 2. Calibrate the load cell. Refer to Calibrating the Load Cell on Page 35.
Span Calibration out of Range	The calibration of the load cell is out of range.	1. Check that: • The load cell is level and locked into place. • There is nothing (for example, the outlet tube, bag or cable for the load cell) touching the pan or base of the load cell. • There are no environmental factors (for example, fans) interfering with the load cell. 2. Calibrate the load cell. Refer to Calibrating the Load Cell on Page 35. Read the on-screen messages carefully, and make sure that you do not place the calibration weight on the load cell too early.
The pump has not been calibrated since the last tube set change. This operation must be completed prior to pumping a solution. **Would you like to calibrate the pump now?**	The pump is not calibrated.	1. Tap **Yes**. 2. Calibrate the pump. Refer to Calibrating the Compounder on Page 65.
Pump calibration failed.	The calibration of the pump failed.	3. Follow steps above for Span Calibration out of Range. 4. For the source container of water, check the following conditions. Refer to Attaching the New Ingredients and Inlets on Page 45. i. The correct inlet is used. ii. The inlet is not kinked. iii. The bag is spiked properly (all the way up to the flange). Refer to Page 49. 5. Clean any spills near the pump rotor. Refer to Cleaning the Compounderon Page 92. 6. Calibrate the load cell. Refer to Calibrating the Load Cell on Page 35. 7. Check that the valve set is installed properly. Refer to Installing the New Valve Set on Page 42. 8. Calibrate the pump. Refer to Calibrating the Compounder on Page 65.
Text : **You have exceeded the maximum allowed calibration limit of 20000mL, the system will recalibrate now. Do you want to calibrate now?**	Too many bags have been processed without meeting the 175 mL auto-calibration threshold. Therefore, a manual calibration is required.	1. Click Yes 2. Calibrate the pump. Refer to Calibrating the Compounder on Page 65.

Issues with the Weight and Load Cell

On-screen Text	Explanation	Suggested Actions
Expected Weight: <*calculated weight*> gm **Actual Weight: <*actual weight*> gm** **Difference: <*weight difference*>%** **The final weight of this solution is outside of the acceptable limit of +/-5%** **Possible Cause: Unknown**	The final bag weight is out of range. After the compounder delivers all the ingredients, the weight of the patient bag differs from the expected weight by more than the acceptable difference.	1. Check that all the source containers are spiked properly. Refer to the steps for spiking a container, starting on Page 48. 2. Check that the outlet tube is installed properly. Refer to Installing the New Valve Set on Page 42. 3. Turn the spike on the SWFI ¼ turn then Calibrate the pump. Refer to Calibrating the Compounder on Page 65. 4. Calibrate the load cell. Refer to Calibrating the Load Cell on Page 35 the re-calibrate the pump. 5. Check that the pump rotor is clean. Refer to Cleaning the Compounder on Page 92.
Expected Weight: <*calculated weight*> gm **Actual Weight: <*actual weight*> gm** **Difference: <*weight difference*>%** **The final weight of this solution is within the acceptable limit of +/-5%, however some ingredients may not have delivered correctly.** **Possible Cause: <*ingredient name*> is possibly <*underweight / overweight*> by <*weight error*> grams**	An individual ingredient delivery is out of range. After the compounder delivers an ingredient, the weight of the patient bag differs from the expected weight by more than the acceptable difference. The compounder checks the weight after individual ingredient deliveries over 100 mL.	1. Check that all the ingredients and inlets are correct and spiked correctly with emphasis on the possible cause ingredient. 2. Check that the valve set is installed properly. Refer to Installing the New Valve Set on Page 42 and Attaching the New Ingredients and Inlets on Page 45. 3. On the MixCheck Report, check for references to occlusions and bubbles. Refer to 4. MixCheck Report on Page 167. Have a pharmacist check the accuracy. 5. Check that the pump rotor is clean. Refer to Cleaning the Compounder on Page 92. 6. Calibrate the load cell. Refer to Calibrating the Load Cell on Page 35. 7. Calibrate the pump. Refer to Calibrating the Compounder on Page 65. 8. Compound a large-volume solution with at least 205 mL of water to make the compounder calibrate automatically. 9. Contact Baxter Technical Support to check that the flow factors are correct. Refer to Getting Help on Page 20.
Bag out of range	Dextrose is pumping too quickly or slowly.	1. Check that there are no environmental factors interfering with pumping dextrose. • Keep the room temperature stable. • Always allow refrigerated dextrose to return to room temperature before using it. 2. Check that the source container is spiked properly. Refer to the steps for spiking a container, starting on Page 48. 3. Check that the correct inlet is assigned to dextrose in the formulary. Refer to Adding or Editing a Product on Page 148.

On-screen Text	Explanation	Suggested Actions
The bag currently on the load cell does not appear to be empty.	Before pumping starts, the load cell detects that the destination bag contains fluid.	If the bag is not empty, and you are: • Compounding the solution, refer to Compounding the Solution Step 2 on Page 72. • Calibrating the compounder, refer to Calibrating the Compounder Step 4 on Page 65. If the bag is empty: 1. Tap **No**. 2. At the *Operation Cancelled* message, tap **OK**. 3. Remove the bag from the load cell. Refer to: • Removing the Patient Bag on Page 75 • Removing the Calibration Bag on Page 69 4. Calibrate the load cell. Refer to Calibrating the Load Cell on Page 35. 5. If necessary, reattach the appropriate bag to the load cell. Refer to: • Attaching the Patient Bag on Page 71 • Attaching the Calibration Bag on Page 68
There does not appear to be a bag hung on the scale.	The load cell detects that the destination bag is not attached.	If the bag is not attached, attach the appropriate bag to the load cell. Refer to: • Attaching the Patient Bag on Page 71 • Attaching the Calibration Bag on Page 68 If the bag is attached: • Tap **No**. • Calibrate the load cell. Refer to Calibrating the Load Cell on Page 35.

Issues with the Pump

On-screen Text	Explanation	Suggested Actions
[Error: 01-13-002] **Unable to start the pump because the pump is in a fault state.**	The pump fault occurred.	1. At the pump screen, tap **Stop** and follow the on-screen instructions. 2. Reboot the compounder. Refer to Rebooting and Shutting Down on Page 32.
Pump faulted. Unable to close valve. Valve is moving.	A system fault or power loss occurred.	1. Write a large "X" on the label of the patient bag, then remove and discard the bag. 2. Reboot the compounder. Refer to Rebooting and Shutting Down on Page 32.
Pump is in fault state and must be reset before use. Reset the pump?	A pump fault occurred.	Tap **Yes** to reset the pump.

Issues with the Occlusion Detector / "Flow Sensor"

NOTE: For all messages about the occlusion detector self-test, tapping **Cancel** displays a *Contact Baxter* message and disables your ability to compound a solution or calibrate the compounder.

On-screen Text	Explanation	Suggested Actions
The Occlusion Detector Test failed. **Sensor failure.** **Select OK to retry** **Select Cancel to exit**	The test failed, possibly because the detector malfunctioned or the tube set was not installed properly.	1. Verify the outlet tube is lying flat along the top of the occlusion sensor and that the tubing is pushed all the way down into the bubble detector. 2. Contact Baxter Technical Support. Refer to Getting Help on Page 20.
The Occlusion Detector Test failed. **Air detected in fluid pathway.** **Select OK to Retry.** **Select Cancel to Exit.**	The test failed because an air bubble was detected in the common fluid pathway.	1. Tap **Cancel**. 2. To help reduce the occurrence of bubbles and make their detection more accurate, refer to the note on Page 87. **NOTE:** To perform the test again, you must re-prime at least one non-UI inlet and then exit the *PRIME AND VERIFY* screen.
The Occlusion Detector Test failed. **Pump door open.** **Select OK to Retry.** **Select Cancel to Exit.**	The test did not finish because the pump door was opened during the test.	1. Close the pump door. 2. Tap **OK**. The test occurs again.
The Occlusion Detector Test failed. **Pump was paused.** **Select OK to Retry.** **Select Cancel to Exit.**	The test did not finish because the pump was paused during the test.	Tap **OK**. The test occurs again.
The Occlusion Detector Test failed. **Select OK to Retry.** **Select Cancel to Exit.**	The test failed for an unknown reason.	Tap **OK**. The test occurs again.
The Occlusion Detector Test did not run because the bubble test failed.	The test did not start because an air bubble was detected in the common fluid pathway, or the outlet tube was not installed properly.	1. Tap **Cancel**. 2. To help reduce the occurrence of bubbles and make their detection more accurate, refer to the note on Page 87. **NOTE:** To perform the test again, you must re-prime at least one non-UI inlet and then exit the *PRIME AND VERIFY* screen.
Cannot set flow sensor status:	The compounder failed to set the status of the occlusion detector when starting to pump.	Contact Baxter Technical Support. Refer to Getting Help on Page 20.

Other Issues

Issue / On-screen Text	Explanation	Suggested Actions
The compounder does not power up.	The power cord or the cable for the display is disconnected.	1. Check that the power cord is connected to the main module and the power source. 2. Check that the cable for the display is connected properly to both the display and the main module. 3. Press and hold the power button until the green LED is illuminated. 4. Clean the power button.
	The power source is not functional.	Connect the power cord to another power source.
The screen of the display does not respond to touch.	The cable for the display is not fully connected.	1. Check that the cable for the display is connected properly to both the display and the main module.
The compounder cannot retrieve orders from the order-entry computer.	The network is temporarily unavailable.	1. Verify the order entry computer is powered on. 2. Verify network connectivity. If the network is down, load the formula by connecting a USB drive. Refer to Loading a Formula by Connecting a USB Drive on Page 213.
The MixCheck Report does not print.	The printer is disconnected or turned off.	Check that the printer is connected and turned on.
	Printing was cancelled inadvertently.	The message about the MixCheck Report being printed appears after you tap **OK** at the message about the final weight. If you quickly tap more than once, you might inadvertently tap **Cancel Printing**. Reprint the report.
	The path to the printer is not set up properly.	Check the path to the printer. Refer to Setting Up the Directories Options on Page 109.
Text: **An unknown pump error/valve error occurred**	An internal software error occurred.	1. Reboot the compounder. Contact Baxter Technical Support. Refer to Getting Help on Page 20.
Text: **Bad file format**	The 2D Formula Barcode/.PAT/.FRM file being read does not match the expected format.	Create a new order in the order-entry software.
Text: **Cancellation in progress. Solution will need to be discarded. Continue?**	During the compounding process, a necessary container replacement was cancelled.	1. Tap **Continue**. 2. Write a large “X” on the label of the patient bag, then remove and discard the bag.
Text: **Cannot open DB file X exclusively**	Compaction of the database failed because another program was accessing the database.	1. Close the other program that is accessing the database. 2. Try compacting the database again. Refer to Compacting the Database on Page 96. 3. Reboot the compounder. Refer to Rebooting and Shutting Down on Page 32.

Issue / On-screen Text	Explanation	Suggested Actions
Text: **Cannot open DB X after compaction**	The database was compacted but cannot be opened. There may be a hard drive error or database corruption.	Contact Baxter Technical Support. Refer to Getting Help on Page 20.
Text: **Cannot resume:**	The pump failed to resume compounding.	Close the pump door.
Text: **Compounder connection not established. Must connect to continue.**	The cable for the display is disconnected or damaged.	Check that the cable for the display is connected properly to both the display and the main module, and that the cable is not damaged.
Text: **No Pump Device Assigned**	A software error occurred.	Reconnect the cord and cables. Refer to Step 6 on Page 24.
Text: **No Scale Device Assigned**	A software error occurred.	Reconnect the cord and cables. Refer to Step 6 on Page 24.
Text: **No Valve Device Assigned**	A software error occurred.	Reconnect the cord and cables. Refer to Step 6 on Page 24.
Text: **Time out.**	A hardware communication error occurred.	1. Shut down the compounder. Refer to Rebooting and Shutting Down on Page 32. 2. Check that the cord and cables are connected properly. Refer to Installing the Compounder on Page 22. 3. Turn the compounder on. Refer to Starting Up and Logging In on Page 30.
Text: **Unable to save current DB**	The current database cannot be saved. There may be a hard drive failure, missing directory, network failure (if the destination is on a network drive) or issue with permissions.	Contact Baxter Technical Support. Refer to Getting Help on Page 20.
Text: **Valve is moving.**	A port cannot be closed.	Reboot the compounder. Refer to Rebooting and Shutting Down on Page 32.
Text: **Backup failed: '<Configured Backup path with Database name>' is not a valid path. Make sure that the path name is spelled correctly and that you are connected to the server on which the file resides**	Backup failed due to either a network failure or an incorrect backup folder path.	If you are saving backups on a server confirm the network connectivity. If the problem persists, check the path of the backup folder. Refer to Setting Up the Directories Options on Page 109.
Text: **Your account has been locked because the number of consecutive log-in failures exceeded the maximum allowed**	For security purposes, your account is locked after 3 unsuccessful consecutive attempts to login.	After your account is locked, you may wait 5 minutes to try again, or an administrator may reset your password.

LOADING A FORMULA BY CONNECTING A USB DRIVE

Some facilities may use this method if they use order-entry software but the network is temporarily unavailable.

IMPORTANT! This method requires:

- Formula Entry permissions. For more information about user groups and permissions, refer to Setting Up the Users on Page 125.
- Order-entry software on a separate computer. This software must be able to produce both a .PAT/.FRM file and a corresponding label with a barcode. Both the .PAT/.FRM file and barcode must be compatible with the compounder. Abacus software meets these requirements. For more information, or if a barcode cannot be printed, contact Baxter Technical Support. Refer to Getting Help on Page 20.
- USB drive

  NOTE: Be sure that the USB drive is free of viruses.
- Barcode scanner at the compounder

In the order-entry software, the pharmacist creates an order, which creates a barcode and the corresponding .PAT/.FRM file that contains the patient information and the formula. The pharmacist saves the order onto a USB drive. A corresponding label with the barcode also prints at the same time. Typically, a technician applies this label to a new patient bag and brings it to the compounder. However, this process depends on your facility's protocol.

At the compounder:

1. Connect the USB drive to a USB port on the bottom of the display.
2. Set up the **ExactaMix Pro** software to look for formula files on the USB drive. For instructions, refer to Setting Up the Directories Options on Page 109.

   NOTE: The software will continue to look for formula files in this location until you change it back to the original location.
3. Scan the barcode on the label of the patient bag.

   The compounder retrieves the order file from the USB drive and populates the pump screen with the name and volume of each ingredient to be pumped. The compounder reads the Drug ID number of each ingredient in the formula and matches this number to one in the formulary. In the United States, the Drug ID number is usually the NDC.

WARNING

The Drug ID number for each product in the formula must exactly match the Drug ID number for that product in the compounder's formulary. If a Drug ID number is assigned to one product in the order-entry software, and that number is assigned to a different product in the compounder's formulary, the compounder may pump the wrong ingredient. *It is the user's responsibility to ensure that Drug ID numbers are properly and consistently assigned in both systems.*

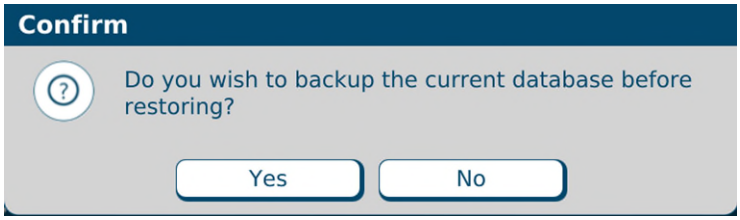
NOTE: If any ordered ingredients are not in the configuration on the compounder, are not allowed as auto-additions or have a volume less than 0.2 mL, the compounder software will identify these ingredients as manual additions.

4. Continue with Fulfilling the Order (Basic Process) on Page 70.

RESTORING THE DATABASE

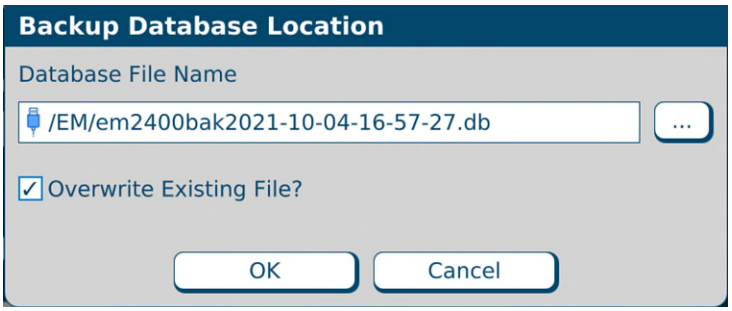
If certain types of issues occur, Baxter Technical Support may ask you to restore the database.

1. At the menu screen, tap **Tools > Database > Restore Database**.
2. At the *Do you wish to backup* message, if you:
   - Want to back up the current database before restoring, tap **Yes** and continue with the next step.
   - Do not want to back up the current database before restoring, tap **No** and skip to step 5.



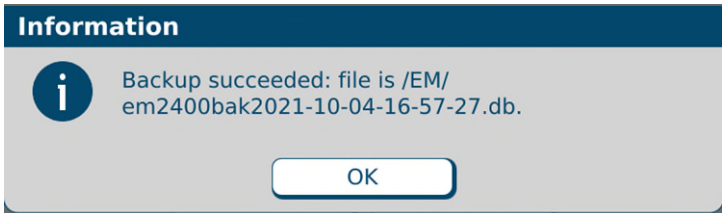
Message

3. At the *Backup Database Location* window:
   a. If desired, change the location of the backup by tapping the button to the right of the current location (not recommended).
   b. Check **Overwrite Existing File?** to replace the previous backup file.
   c. Tap **OK**.



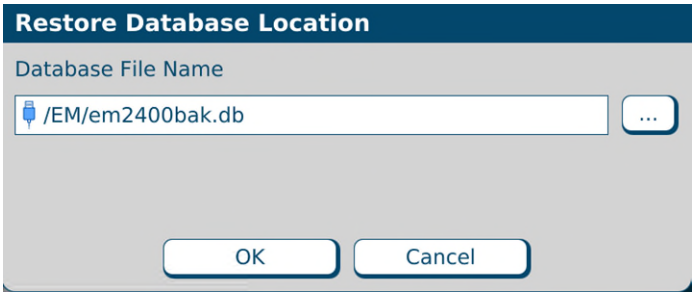
Backup Database Location window

4. At the *Backup succeeded* message, tap **OK**.



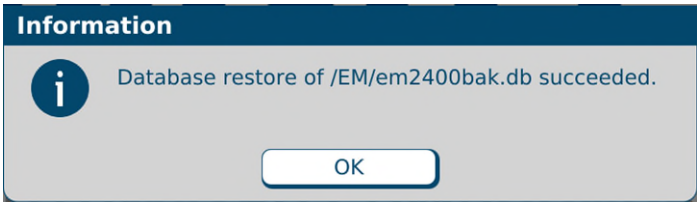
Message

5. At the *Restore Database Location* window:
   a. If desired, change the location of the backup you want to restore by tapping the button to the right of it.
   b. Tap **OK**.



Restore Database Location window

6. At the *Database restored successfully* message, tap **OK**. The compounder is now ready to use the restored database.



Message

NOTE: Upon login Baxter recommends resetting the directories to the correct path. Refer to Setting Up the Directories Options on Page 109.

GLOSSARY

Use this glossary to help you understand any terms that may be unfamiliar.

Term	Definition
Acceptable weight variance	The percentage by which the final weight of the compounded solution, or the weight of an ingredient delivery, is allowed to differ from the expected weight. You can specify the variance.
Alarm	An audible tone that indicates an error state.
Auto-addition	An option that allows you to add an ingredient to the existing configuration when needed, instead of selecting a new configuration (which would require you to prime and verify all the inlets and ingredients).
Backup	The process and result of saving database information to a location other than the compounder.
Base plate	The common base on which the compounder's components sit.
Blackbox data	The logged activities of the compounder, mainly based on the communication between software, firmware and user actions.
Cardioplegia	A specific combination of ingredients used to induce cardiac arrest during cardiac surgery.
Common fluid pathway	The area from the port through the valve set to the destination bag. One or more ingredients can be present in this area.
Compounder	The complete device with all of its hardware components and software, excluding the tube set and bags.
Compound / compounding	The process of pumping ingredients into a patient bag.
Configuration	A designation of the products that will be attached to the ports, the sequence in which they will be pumped, any allowable auto-additions, the ingredient and volume to use for any ingredient flushes, the Universal Ingredient and the volume to use for the final flush.
Continuous Renal Replacement Therapy (CRRT)	A form of therapy to dialyze acute patients continuously, when these patients cannot tolerate conventional dialysis.
Daily setup	The process of attaching all the ingredients for a specific configuration to the compounder and preparing to compound solutions. Includes priming, verification and calibration.
Daily use components	The disposable components (tube set) and destination bags.
Database	Information containing operating parameters, the formulary and other definable variables to be used by the compounder.
Deliver / delivering	The act of pumping ingredients from a source container to the destination bag.
Delivery	A single, measured volume of fluid that has been pumped into the destination bag.
Destination bag	A sterile container that holds the fluid pumped from the source containers. It can be a patient bag (used for delivering the finished solution to a patient) or a calibration bag (used for collecting any fluid that is not intended for a patient).
Direct entry mode	A mode where you enter a formula manually by specifying the ingredient and volume to be delivered from each port.
Display	The touch-screen display for the user interface. It mounts to the base plate.
Disposables	See *tube set*.
Dose	A specific volume and concentration of an ingredient.
Electronic Y-site	A setup option that helps to improve the efficiency of pumping common ingredients. When the first container of this ingredient has emptied, the compounder continues pumping from the next container of this ingredient.
Enhanced flush	Two intermediate flushes followed by the final flush.
Epidural	An injection into the epidural space of the spine for regional anesthesia.

Term	Definition
Equivalent ingredient products	Products of the same ingredient type that may have different container sizes, container types or manufacturers.
Final flush	A delivery of fluid that is pumped to clear all delivered ingredients from the common fluid pathway, to ensure that these ingredients are fully present in the finished solution. The fluid used for this flush is always the Universal Ingredient. The standard volume is 30 mL, but it can be changed.
Finished solution	The ingredients in the patient bag after compounding, including manual additions.
Flow factor	A value associated with each ingredient that compares the flow of that ingredient to the flow of water. The flow factor accounts for the ingredient's viscosity, the size and type of its source container, its inlet, its venting and other factors that affect its delivery.
Fluid pathway	See *common fluid pathway*.
Flush	See *final flush*, *ingredient flush* or *intermediate flush*.
Formula	A recipe of ingredients to be compounded. Typically, it is created by the pharmacist, based on a prescription from a physician.
Formulary	The list of ingredients, and associated products, that can be attached to the compounder.
Incompatible group	A group of ingredients that you identify as having interaction concerns with other ingredients.
Ingredient	A solution of a specific chemical entity at a specific concentration, regardless of the container size, container type or manufacturer. One ingredient may have several associated products.
Ingredient flush	A delivery of fluid that is pumped to clear the common fluid pathway between the delivery of certain ingredients that have interaction concerns. The fluid used for this flush is usually the Universal Ingredient, but it can be any compatible ingredient in the configuration and formula.
Ingredient group	A list of chemically similar ingredients, used for defining incompatible groups.
Inlet	A sterile tube with a spike or Luer end attached. The spike or Luer end attaches to a source container, and the other end attaches to a port on the valve set.
Intermediate flush	A delivery of fluid that comes just before the final flush as part of an enhanced flush. The fluid used for this flush is always the Universal Ingredient, and it is pumped in two deliveries of 50 mL each.
Large-volume delivery	See *macro ingredient*.
Load cell	The component that holds the destination bag, weighs the compounded solution and reports the measurement to the software. It mounts to the base plate.
Macro ingredient	A generic term used to describe an ingredient that uses a large-bore inlet and is delivered in volumes equal to or greater than 5 mL.
Main module	The component that contains the valve actuators, occlusion detector, bubble detector, pump chamber and power supply. It mounts to the base plate.
Maintenance	The act of performing scheduled or expected work on the compounder.
Manage	The act of creating, modifying, saving or deleting information within the software.
Manual addition	A product that is added to the compounded solution manually, after compounding has finished.
Message	Small on-screen window or other text that provides information or instructions but does not allow entry of information.
Micro ingredient	A generic term used to describe an ingredient that uses a micro inlet and is delivered in volumes less than 5 mL.
National Drug Code (NDC)	A unique, three-segment number used in the United States to identify drug products used by humans.
Occlusion	A blockage in the fluid pathway.
OEM	Original Equipment Manufacturer i.e., Baxter Healthcare

Term	Definition
Outlet tube	The section of tube on the discharge side of the valve set. It connects the valve set to the destination bag.
.PAT file	A file, created in the order-entry software, that contains the patient information and formula.
.FRM file	An encrypted file, created in the order-entry software, that contains the patient information and formula.
2D Formula Barcode Label	A label, printed by the order-entry software, that includes patient information and formula and a 2D Barcode.
Patient	The recipient of the finished solution.
Permissions	The privileges granted to groups of users to allow them to perform specific functions.
Pop-up message	A temporary window that appears to notify the user that they need to take an action.
Port	The interface between the valve set and the inlets for source containers.
Prime	To pump a small volume of an ingredient through an inlet, to remove air bubbles from the inlet and prepare it for compounding the solution.
Privileges	See *permissions*.
Product	An ingredient in a particular container size and type from a specific manufacturer. Several products can be associated with one ingredient.
Pump	A peristaltic device used to push fluid through the outlet tube.
Pump module	See *main module*.
Remainder	A value in the software that represents the actual volume of fluid remaining in the source container.
Scale	See *load cell*.
Screen	Information window that occupies the entire display
Sequence	The order in which ingredients are pumped/delivered to the destination bag.
Solution	The mixture of ingredients that have been compounded.
Small-volume delivery	See *micro ingredient*.
Source container	A container (bag, bottle, vial or syringe) that holds one ingredient.
Tolerance	The amount by which any characteristic (for example, dimensional, chemical, physical or mechanical properties) may vary from that specified.
Total Parenteral Nutrition (TPN)	A form of intravenous therapy that requires multiple fluid ingredients to be accurately compounded into a single solution to support a patient's nutritional needs.
Tube set	The valve set and inlets.
Universal Ingredient (UI)	The ingredient that is used to flush the common fluid pathway. This ingredient must be included in the configuration and the formula being compounded.
Unload	The precaution of removing a formula from the pump screen when you navigate away from this screen. Unloading does not delete the formula from the database.
User accounts	The accounts that contain the user names, user permissions and other attributes as determined by the facility.
Valve set	A sterile, multiple-port valve with an outlet tube attached. The valve body fits over the valve actuators on the compounder, protecting them from damage. The outlet tube attaches to the destination bag.
Variance	One measure of statistical dispersion, averaging the squared distance of its possible values from the expected value (mean).
Volume	The physical amount of the ingredient that is delivered, typically in milliliter (mL) units.
Window	An on-screen feature that provides information or instructions and allows you to make choices or enter information. Pay attention to the text, because some windows may include critical information.

APPENDIX

SPECIFICATIONS

Display

Operating software:	Linux Yocto Project
CPU:	Quad-core Arm® Cortex®-A9 1.2 GHz
System on Module (SOM)	ConnectCore 6+ , Cortex®-A9
Memory:	8 GB flash, 2 GB DDR3 , 64 GB Micro SD card
Screen Resolution:	WXGA (1280 x 800)
Ethernet:	1 Gigabit Ethernet network connectivity
USB ports:	4 ports, USB 2.0 supporting USB 1.1/2.0
Wi-Fi Compatibility	IEEE 802.11 b/g/n/ac
Barcode scanner holder specifications	Length: 4.4 in. (11.3 cm) Width: 3.33 in. (8.5 cm) Height: 7.4 in. (18.8 cm) Weight: 0.14 lb (0.06 kg)

The display supports the connection and use of a USB 1.1/2.0 keyboard and mouse.

Dimensions

Main module:	Width: 24 in. (61 cm) Depth: 10 in. (25.4 cm) Height: 10 in. (25.4 cm)
Display:	Width: 11.5 in. (29.1 cm) Depth: 2.2 in. (5.5 cm) Height: 7.9 in. (20 cm)
Load cell:	Width: 13 in. (33 cm) Depth: 8 in. (20.3 cm) Height: 10 in. (25.4 cm)
Compounder, without vial rack:	Width: 33 in. (76.2 cm) Depth: 19 in. (48.3 cm) Height: 12 in. (30.5 cm)
Compounder, with vial rack: (these may vary with vial rack size)	Width: 41 in. (104 cm) Depth: 20 in. (50.8 cm) Height: 30 in. (76.2 cm)

Weight

Main module:	40.0 lb (18.14 kg)
Display:	4.3 lb (1.95 kg)
Load cell:	5.1 lb (2.3 kg)
Base:	13.0 lb (5.89 kg)
Vial rack:	Less than or equal to 13.2 lb (6 kg)
Compounder	Approx. 75 lb (34 kg)

Electrical

Power:	100–240 V AC RMS, 50–60 Hz, 336 W
Line cord:	Use only a Baxter approved line cord
Display Cable:	Use only a Baxter approved display cable
Fuse ratings:	**EXACTA-M** There are two 4 AMP, 5x20mm, SLOW BLOW fuses located in the AC power inlet connector under the EXACTA-M Main Module. **2400-M** There is no user accessible fuse on the 2400-M Main Module.

Performance

Accuracy:	± 0.03 mL at 0.2 mL ± 0.03 mL at 0.4 mL ± 0.06 mL at 1 mL ± 5% at 10 mL and greater
Dispensing of ingredients:	Increments of 0.01 mL
Volume of source containers:	0.2–5,500 mL
Volume of destination bags:	125–5,000 mL
Maximum flow rate of water:	16.6 mL/second
Maximum number of ingredients:	24
Maximum capacity of vial rack:	16 (small-volume vials and 60 mL Luer syringes)

Environmental Conditions

Operating temperature:	59–86°F (15–30°C)
Storage temperature:	32–147°F (0–64°C)
Maximum relative humidity:	10–80%
Maximum altitude:	Not to exceed 3,000 m
Main supply voltage fluctuation:	Not to exceed ±10%
Sound pressure level:	Not to exceed 85 dBA

For Indoor Use Only

ISO Class 5 (Class 100) cleanroom as defined in ISO 14644-1:2015

Class I Equipment (Grounded Type)

Installation (Over Voltage) Category II

Pollution Degree 2 Environment

The maximum circuit voltage of USB 1.1/2.0 is 5.0 V DC with a maximum current of 500 mA DC (all ports combined). Use only Baxter-supplied USB devices.

This equipment is intended for use in a "basic electromagnetic environment" as defined per IEC 61326; such as an office, pharmacy, or clinic. It is not intended to be used in an "industrial environment" or near equipment either sensitive to electromagnetic interference or near equipment that emits electromagnetic interference such as large electrical machinery or near MRI, CAT, Electrosurgical or Electrocautery or similar equipment. If you find that this equipment creates interference with other nearby equipment or is affected by other nearby equipment try changing the orientation or separation of each equipment to reduce the effect.

CAUTION

In the event of an Electrostatic Discharge (ESD) on the display cable connector, a system shutdown may occur. Upon system restart, any in-progress formulations before the ESD event will be unloaded and the valve set will be flushed. See the Power Interruption information on Page 76.

WEEE Compliance

- This symbol on a Baxter product or its packaging means that the product should not be disposed of with general waste. It is your responsibility to dispose of your waste equipment separately from the municipal waste stream. The correct disposal of your end-of-life equipment will help prevent potential negative consequences for the environment and human health.
- Baxter endeavors to reduce the environmental and human health effects of electrical and electronic equipment at the time it is being discarded and offers its EU customers details on to facilitate environmentally sound disposal of this equipment at: https://www.baxter.com/weee-201219eu

WI-FI COMPLIANCE

United States

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC CAUTION: Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC CAUTION: This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

Canada

This device contains license-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's license-exempt RSS(s). Operation is subject to the following two conditions: 1. This device may not cause interference. 2. This device must accept any interference, including interference that may cause undesired operation of the device. L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes : 1. L'appareil ne doit pas produire de brouillage; 2. L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

For indoor use only

Pour usage intérieur seulement

Data transmission is always initiated by software, which is the passed down through the MAC, through the digital and analog baseband, and finally to the RF chip. Several special packets are initiated by the MAC. These are the only ways the digital baseband portion will turn on the RF transmitter, which it then turns off at the end of the packet. Therefore, the transmitter will be on only while one of the aforementioned packets is being transmitted. In other words, this device automatically discontinues transmission in case of either absence of information to transmit or operational failure.

La transmission des données est toujours initiée par le logiciel, puis les données sont transmises par l'intermédiaire du MAC, par la bande de base numérique et analogique et, enfin, à la puce RF. Plusieurs paquets spéciaux sont initiés par le MAC. Ce sont les seuls moyens pour qu'une partie de la bande de base numérique active l'émetteur RF, puis désactiv celui-ci à la fin du paquet. En conséquence, l'émetteur reste uniquement activé lors de la transmission d'un des paquets susmentionnés. En d'autres termes, ce dispositif interrompt automatiquement toute transmission en cas d'absence d'information à transmettre ou de défaillance.

This equipment complies with ISED radiation exposure limits set forth for an uncontrolled environment and meets RSS-102 of the ISED radio frequency (RF) Exposure rules as this equipment has very low levels of RF energy.

Cet équipement est conforme aux limites d’exposition aux rayonnements énoncées pour un environnement non contrôlé et respecte les règles d’exposition aux fréquences radioélectriques (RF) CNR-102 de l’ISDE puisque cet appareil a un niveau très bas d'énergie RF.

Taiwan

取得審驗證明之低功率射頻器材，非經核准，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。 低功率射頻器材之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應 立即停用，並改善至無干擾時方得繼續使用。 前述合法通信，指依電信管理法規定作業之無線電通信。 低功率射頻器材須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。

English Translation: Without permission granted by the NCC, any company, enterprise, or user is not allowed to change frequency, enhance transmitting power or alter original characteristic as well as performance to approved low power radio-frequency devices. The low power radio-frequency devices shall not influence aircraft security and interfere legal communications; If found, the user shall cease operating immediately until no interference is achieved. The said legal communications means radio communications is operated in compliance with the Telecommunications Management Act. The low power radio-frequency devices must be susceptible with the interference from legal communications or ISM radio wave radiated devices.

應避免影響附近雷達系統之操作。

English Translation: The use of equipment near radar systems should be avoided.

高增益指向性天線只得應用於固定式點對點系統。

English Translation: High-gain directional antennas can be used only in fixed point-to-point systems.

WARRANTY STATEMENT

Baxter Healthcare Corporation provides a limited warranty for the **ExactaMix Pro** 2400 Compounder.

See your lease or purchase contract for details about the warranty.

If the equipment is under warranty, Baxter will replace the defective equipment. Equipment that is not under warranty can also be replaced, however, the customer is responsible for the cost of repairs and shipping.

Baxter Healthcare Corporation warrants that the **ExactaMix Pro** 2400 Operating Software will perform as described in the operator manual, by the release notes with the currently released version and when operated on a properly configured computer using a properly configured load cell and barcode scanner. Where there is a discrepancy between the manual and the operation of the software, Baxter Healthcare Corporation may, at its discretion, revise either the software or the text of the manual.

This software is intended solely for the operation of the **ExactaMix Pro** 2400 Compounder for the preparation of compounded sterile formulas. It is not intended to replace the professional knowledge or judgment of a Registered Pharmacist in the preparation of such formulas.

No other warranties, whether express or implied, made by any representative or other agent of Baxter Healthcare Corporation shall be binding upon Baxter Healthcare Corporation. This is an exclusive warranty.

Baxter Healthcare Corporation
One Baxter Parkway
Deerfield IL 60015 USA

Baxter Healthcare Ltd.
Caxton Way, Thetford,
Norfolk IP24 3SE, United Kingdom
UK

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The UKCA mark is not applicable to the following product codes EXM24DY, EXM24DYR, EXM12DY and EXM12DYR which are not available in United Kingdom.

Assembled in U.S.A.