

**DEXTROSE- dextrose monohydrate injection, solution**  
**Hospira, Inc.**

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**5% Dextrose Injection, USP**

**ADD-Vantage™ Diluent**  
**Flexible Plastic**  
**Container**  
only

Rx

**DESCRIPTION**

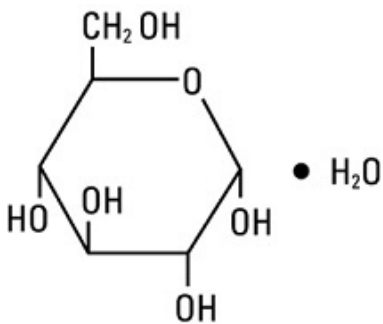
5% Dextrose Injection, USP solution is sterile and nonpyrogenic. It is a parenteral solution containing 50 mg/mL of dextrose, hydrous in water for injection and is intended for intravenous administration after admixing with an ADD-Vantage vial, or single-dose powdered drug vials with 20 mm closure using the ADD-Vantage ADDAPTOR™  
**(WARNING: DO NOT USE WITH CHEMOTHERAPY AGENTS).**

The solution contains no bacteriostat, antimicrobial agent or added buffer and is intended only as a single-dose injection. When smaller doses are required the unused portion should be discarded.

The solution is slightly hypotonic (253 mOsmol/liter; calc.) in relation to the extracellular fluid (approx. 280 mOsmol/liter). The pH of the solution is 4.3 (3.2 - 6.5).

The solution is a parenteral fluid and nutrient replenisher.

Dextrose, USP is chemically designated D-glucose, monohydrate ( $C_6H_{12}O_6 \cdot H_2O$ ), a hexose sugar freely soluble in water. It has the following structural formula:



Water for Injection, USP is chemically designated  $H_2O$ .

The flexible plastic container is fabricated from a specially formulated polyvinylchloride. Water can permeate from inside the container into the overwrap but not in amounts sufficient to affect the solution significantly. Solutions in contact with the plastic container may leach out certain chemical components from the plastic in very small amounts; however, biological testing was supportive of the safety of the plastic container materials. Exposure to temperatures above  $25^{\circ}C/77^{\circ}F$  during transport and storage will lead to minor losses in moisture content. Higher temperatures lead to greater losses. It is unlikely that these minor losses will lead to clinically significant changes within the expiration period.

**CLINICAL PHARMACOLOGY**

When administered intravenously, this solution provides a source of water and carbohydrate.

Solutions containing carbohydrate in the form of dextrose restore blood glucose levels and provide calories. Carbohydrate in the form of dextrose may aid in minimizing liver glycogen depletion and exerts a protein-sparing action. Dextrose injected parenterally undergoes oxidation to carbon dioxide and water.

Water is an essential constituent of all body tissues and accounts for approximately 70% of total body weight. Average normal adult daily requirements range from two to three liters (1.0 to 1.5 liters each for insensible water loss by perspiration and urine production).

Water balance is maintained by various regulatory mechanisms. Water distribution depends primarily on the concentration of electrolytes in the body compartments and sodium ( $\text{Na}^+$ ) plays a major role in maintaining physiologic equilibrium.

## **INDICATIONS AND USAGE**

Intravenous solutions containing dextrose are indicated for parenteral replenishment of fluid and minimal carbohydrate calories as required by the clinical condition of the patient.

In this dosage form, 5% Dextrose Injection, USP is intended to be used as a diluent for the contents of an ADD-Vantage vial, or single-dose vials with 20 mm closure using the ADD-Vantage ADDAPTOR™.

## **CONTRAINDICATIONS**

Dextrose Injection without electrolytes should not be administered simultaneously with blood through the same infusion set because of the possibility that pseudoagglutination of red cells may occur.

## **WARNINGS**

Excessive administration of potassium-free solutions may result in significant hypokalemia.

The intravenous administration of these solutions can cause fluid and/or solute overloading resulting in dilution of serum electrolyte concentrations, overhydration, congested states or pulmonary edema.

The risk of dilutional states is inversely proportional to the electrolyte concentrations of administered parenteral solutions. The risk of solute overload causing congested states with peripheral and pulmonary edema is directly proportional to the electrolyte concentrations of such solutions.

## **PRECAUTIONS**

Clinical evaluation and periodic laboratory determinations are necessary to monitor changes in fluid balance, electrolyte concentrations and acid-base balance during prolonged parenteral therapy or whenever the condition of the patient warrants such evaluation.

Solutions containing dextrose should be used with caution in patients with known subclinical or overt diabetes mellitus.

Do not administer unless solution is clear and container is undamaged. Discard unused portion.

**Carcinogenesis, Mutagenesis, Impairment of Fertility:** Studies with solutions from ADD-Vantage flexible plastic containers have not been performed to evaluate

carcinogenic potential, mutagenic potential or effects on fertility.

**Pregnancy:** Animal reproduction studies have not been conducted with dextrose. It is also not known whether dextrose can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Dextrose should only be given to a pregnant woman if clearly needed.

**Nursing Mothers:** Caution should be exercised when solutions from ADD-Vantage flexible containers are administered to a nursing woman.

**Pediatric Use:** The safety and effectiveness in the pediatric population are based on the similarity of the clinical conditions of the pediatric and adult populations. In neonates or very small infants the volume of fluid may affect fluid and electrolyte balance.

Frequent monitoring of serum glucose concentrations is required when dextrose is prescribed to pediatric patients, particularly neonates and low birth weight infants.

In very low birth weight infants, excessive or rapid administration of dextrose injection may result in increased serum osmolarity and possible intracerebral hemorrhage.

## ADVERSE REACTIONS

Reactions which may occur because of the solution or the technique of administration include febrile response, infection at the site of injection, venous thrombosis or phlebitis extending from the site of injection, extravasation and hypervolemia.

If an adverse reaction does occur, discontinue the infusion, evaluate the patient, institute appropriate therapeutic countermeasures and save the remainder of the fluid for examination if deemed necessary.

## OVERDOSAGE

In the event of overhydration or solute overload, re-evaluate the patient and institute appropriate corrective measures. See **WARNINGS, PRECAUTIONS, and ADVERSE REACTIONS.**

## DOSAGE AND ADMINISTRATION

The dose is dependent on the age, weight and clinical condition of the patient.

As reported in the literature, the dosage and constant infusion rate of intravenous dextrose must be selected with caution in pediatric patients, particularly neonates and low birth weight infants, because of the increased risk of hyperglycemia/hypoglycemia.

Parenteral drug products should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit. See **PRECAUTIONS.**

## HOW SUPPLIED

5% Dextrose Injection, USP is supplied in single-dose flexible plastic ADD-Vantage™ diluent containers.

Store at 20 to 25°C (68 to 77°F). [See USP Controlled Room Temperature.]

Unit of Sale	Volume
<b>NDC 0409-7100-66</b> Case of 50 - 50 mL bags	50 mL bags
<b>NDC 0409-7100-67</b>	100 mL bags

Case of 50 - 100 mL bags	100 mL bags
<b>NDC 0409-7100-02</b> Case of 24 - 250 mL bags	250 mL bags

**INSTRUCTIONS FOR USE WITH ADD-VANTAGE VIAL**

**These instructions for use should be made available to the individuals who perform the reconstitution steps.**

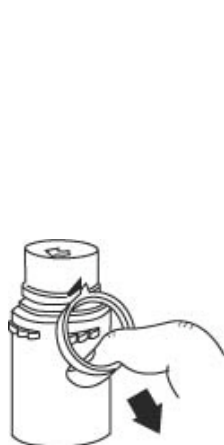
**To Open:**

Peel overwrap at corner and remove solution container. Use unit within 30 days of opening overwrap, as long as the use date does not exceed the printed expiration date. Some opacity of the plastic due to moisture absorption during the sterilization process may be observed. This is normal and does not affect the solution quality or safety. The opacity will diminish gradually.

**To Assemble Vial and Flexible Diluent Container:**

**(Use Aseptic Technique)**

1. Remove the protective covers from the top of the vial and the vial port on the diluent container as follows:
  - a. To remove the breakaway vial cap, swing the pull ring over the top of the vial and pull down far enough to start the opening (SEE FIGURE 1.), then pull straight up to remove the cap. (SEE FIGURE 2.)  
**NOTE:** Once the breakaway cap has been removed, do not access vial with syringe.



**Fig. 1**

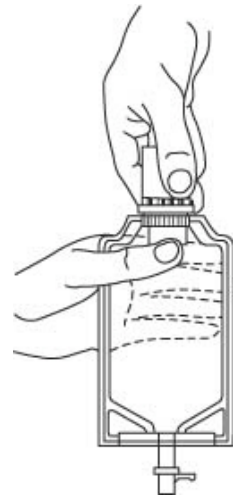


**Fig. 2**

- b. To remove the vial port cover, grasp the tab on the pull ring, pull up to break the three tie strings, then pull back to remove the cover. (SEE FIGURE 3.)
2. Screw the vial into the vial port until it will go no further. THE VIAL MUST BE SCREWED IN TIGHTLY TO ASSURE A SEAL. This occurs approximately 1/2 turn (180°) after the first audible click. (SEE FIGURE 4.) The clicking sound does not assure a seal; the vial must be turned as far as it will go.  
**NOTE:** Once vial is seated, do not attempt to remove. (SEE FIGURE 4.)
3. Recheck the vial to assure that it is tight by trying to turn it further in the direction of assembly.
4. Label appropriately.



**Fig. 3**



**Fig. 4**

### To Reconstitute the Drug:

1. Squeeze the bottom of the diluent container gently to inflate the portion of the container surrounding the end of the drug vial.
2. With the other hand, push the drug vial down into the container telescoping the walls of the container. Grasp the inner cap of the vial through the walls of the container. (SEE FIGURE 5.)
3. **Pull the inner cap from the drug vial. (SEE FIGURE 6.) Verify that the rubber stopper has been pulled out, allowing the drug and diluent to mix.**
4. Mix container contents thoroughly and use within the specified time.
5. Look through the bottom of the vial to verify that the stopper has been removed and complete mixing has occurred. (SEE FIGURE 7.)

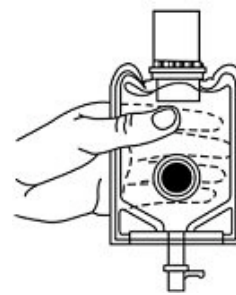
If the rubber stopper is not removed from the vial and medication is not released on the first attempt, the inner cap may be manipulated back into the rubber stopper without removing the drug vial from the diluent container. Repeat steps 3 through 5.



**Fig. 5**



**Fig. 6**



**Fig. 7**

### Preparation for Administration:

#### (Use Aseptic Technique)

1. Confirm the activation and admixture of vial contents.
2. Check for leaks by squeezing container firmly. If leaks are found, discard unit as sterility may be impaired.
3. Close flow control clamp of administration set.

4. Remove cover from outlet port at bottom of container.
5. Insert piercing pin of administration set into port with a twisting motion until the pin is firmly seated. **NOTE:** See full directions on administration set carton.
6. Lift the free end of the hanger loop on the bottom of the vial, breaking the two tie strings. Bend the loop outward to lock it in the upright position, then suspend container from hanger.
7. Squeeze and release drip chamber to establish proper fluid level in chamber.
8. Open flow control clamp and clear air from set. Close clamp.
9. Attach set to venipuncture device. If device is not indwelling, prime and make venipuncture.
10. Regulate rate of administration with flow control clamp.

**WARNING: Do not use flexible container in series connections.**

**INSTRUCTIONS FOR USE WITH ADD-VANTAGE ADDAPTOR™**

**The instructions for use provided with the ADD-Vantage ADDAPTOR™ should be made available to the individuals who perform the reconstitution steps.**

Distributed by Hospira, Inc., Lake Forest, IL 60045



USA

LAB-1143-3.0

Revised: 09/2021

**PRINCIPAL DISPLAY PANEL - 50 mL Bag Label**

PULL INNER PLUG/STOPPER  
AND MIX DRUG BEFORE USE

ADD-Vantage™ Unit  
NDC 0409-7100-68

5% DEXTROSE  
Injection, USP

50  
mL

EACH 100 mL CONTAINS DEXTROSE, HYDROUS 5 g.  
253 mOsmol/LITER (calc.). pH 4.3 (3.2 TO 6.5)  
DEXTROSE SOLUTIONS WITHOUT SALTS SHOULD  
NOT BE USED IN BLOOD TRANSFUSIONS BECAUSE  
OF POSSIBLE ROULEAU FORMATION. FOR USE ONLY  
WITH ADD-Vantage™ SYSTEM COMPONENTS. SINGLE-  
DOSE CONTAINER. FOR IV USE. USUAL DOSAGE: SEE  
PACKAGE INSERT. STERILE, NONPYROGENIC. USE ONLY  
IF SOLUTION IS CLEAR AND CONTAINER IS UNDEMANAGED.  
MUST NOT BE USED IN SERIES CONNECTIONS.

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HOSPIRA, INC.,  
LAKE FOREST, IL 60045 USA

Rx ONLY  
IM-4480  
14475201

3  
V  
CONTAINS DEHP

**PULL INNER PLUG/STOPPER  
AND MIX DRUG BEFORE USE**

NO COPY

MINIMUM CLEARANCE BETWEEN COLORS WHEN 2-COLOR PRINTING IS SPECIFIED

ADD-Vantage™ Unit

NDC 0409-7100-68

**5% DEXTROSE** **50**  
Injection, USP **mL**

NO COPY  
NO INK

EACH 100 mL CONTAINS DEXTROSE, HYDROUS 5 g.  
253 mOsmol/LITER (calc.) pH 4.3 (3.2 TO 6.5)  
DEXTROSE SOLUTIONS WITHOUT SALTS SHOULD  
NOT BE USED IN BLOOD TRANSFUSIONS BECAUSE  
OF POSSIBLE ROULEAU FORMATION. FOR USE ONLY  
WITH ADD-Vantage™ SYSTEM COMPONENTS. SINGLE-  
DOSE CONTAINER. FOR IV USE. **USUAL DOSAGE:** SEE  
PACKAGE INSERT. STERILE, NONPYROGENIC. USE ONLY  
IF SOLUTION IS CLEAR AND CONTAINER IS UNDAMAGED.  
MUST NOT BE USED IN SERIES CONNECTIONS.



CONTAINS DEHP

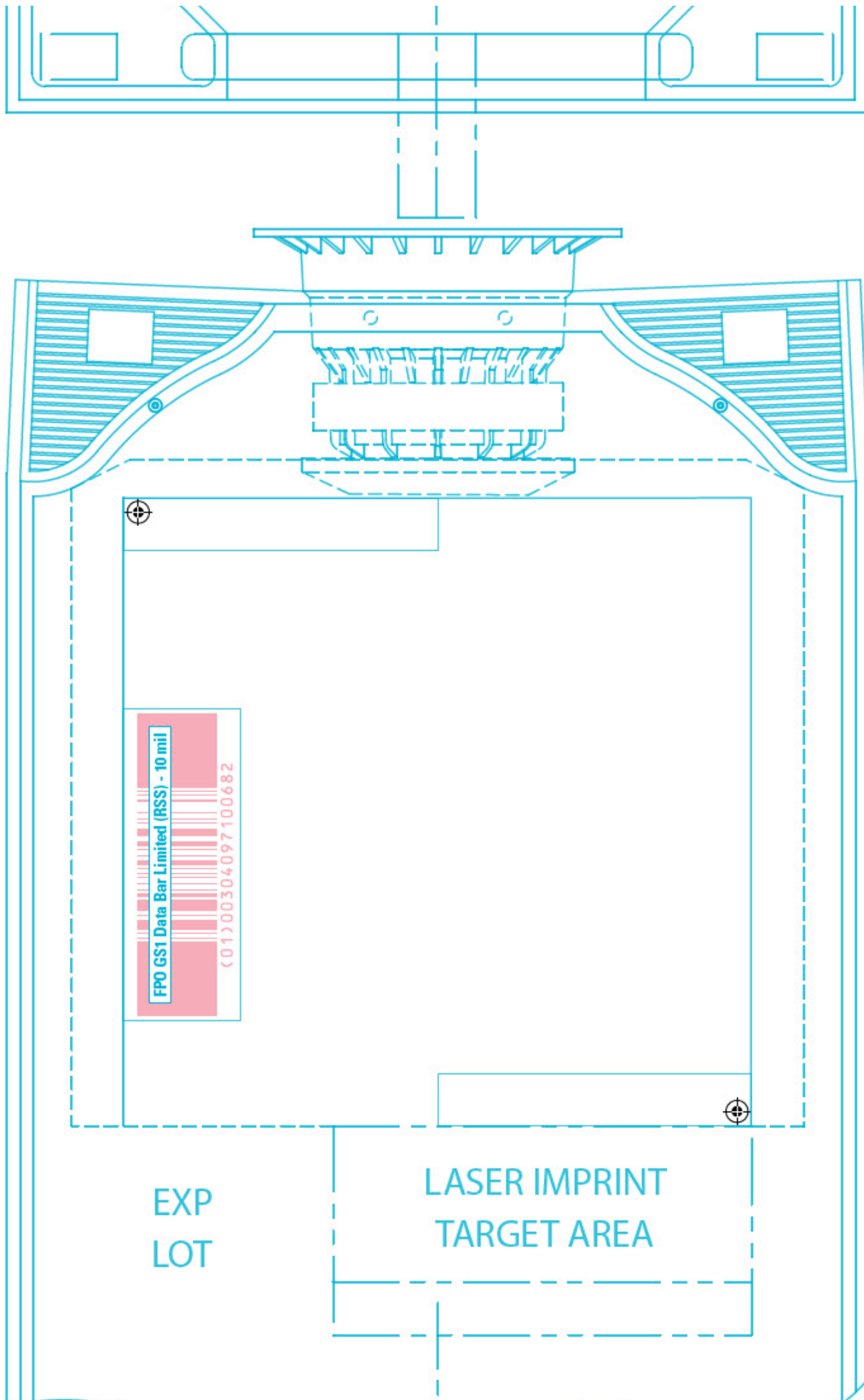
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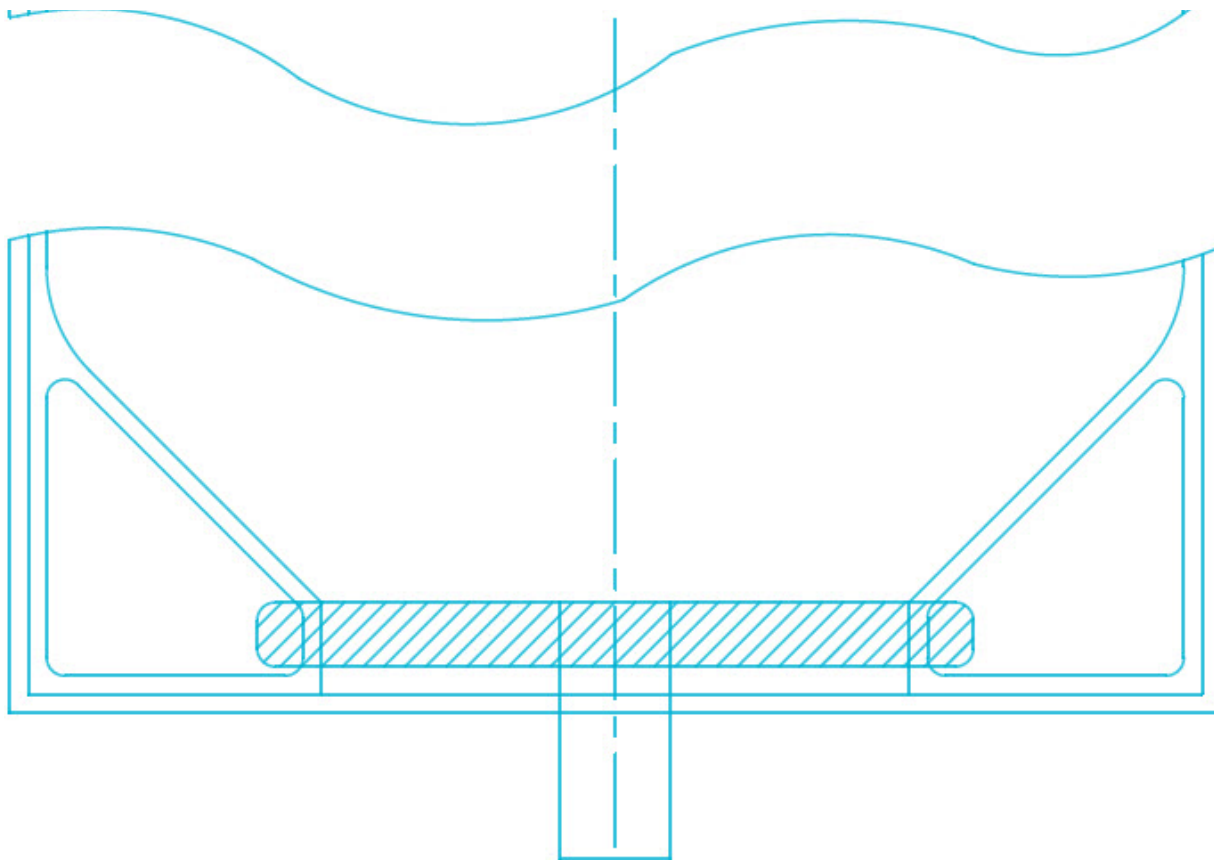
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IM-4480  
14475201

EXP  
LOT

HOT STAMP LOT NO.  
AND EXP. DATE  
TARGET AREA







**PRINCIPAL DISPLAY PANEL - 100 mL Bag Label**

PULL INNER PLUG/STOPPER  
AND MIX DRUG BEFORE USE

ADD-Vantage™ Unit  
NDC 0409-7100-69

5% DEXTROSE  
Injection, USP

100  
mL

EACH 100 mL CONTAINS DEXTROSE, HYDROUS 5 g.  
253 mOsmol/LITER (calc.). pH 4.3 (3.2 TO 6.5)  
DEXTROSE SOLUTIONS WITHOUT SALTS SHOULD  
NOT BE USED IN BLOOD TRANSFUSIONS BECAUSE OF  
POSSIBLE ROULEAU FORMATION. FOR USE ONLY WITH  
ADD-Vantage™ SYSTEM COMPONENTS. SINGLE-DOSE  
CONTAINER. FOR IV USE. USUAL DOSAGE: SEE PACKAGE  
INSERT. STERILE, NONPYROGENIC. USE ONLY IF SOLUTION  
IS CLEAR AND CONTAINER IS UNDAMAGED. MUST NOT  
BE USED IN SERIES CONNECTIONS.

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LAKE FOREST, IL 60045 USA

Rx ONLY  
IM-4481  
14475601

V  
CONTAINS DEHP

**PULL INNER PLUG/STOPPER  
AND MIX DRUG BEFORE USE**

NO COPY

MINIMUM CLEARANCE BETWEEN COLORS WHEN 2-COLOR PRINTING IS SPECIFIED

ADD-Vantage™ Unit

NDC 0409-7100-69

**5% DEXTROSE** **100**  
Injection, USP **mL**

NO COPY  
NO INK

EACH 100 mL CONTAINS DEXTROSE, HYDROUS 5 g.  
253 mOsmol/LITER (calc.) pH 4.3 (3.2 TO 6.5)  
DEXTROSE SOLUTIONS WITHOUT SALTS SHOULD  
NOT BE USED IN BLOOD TRANSFUSIONS BECAUSE OF  
POSSIBLE ROULEAU FORMATION. FOR USE ONLY WITH  
ADD-Vantage™ SYSTEM COMPONENTS. SINGLE-DOSE  
CONTAINER. FOR IV USE. **USUAL DOSAGE:** SEE PACKAGE  
INSERT. STERILE, NONPYROGENIC. USE ONLY IF SOLUTION  
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BE USED IN SERIES CONNECTIONS.



CONTAINS DEHP

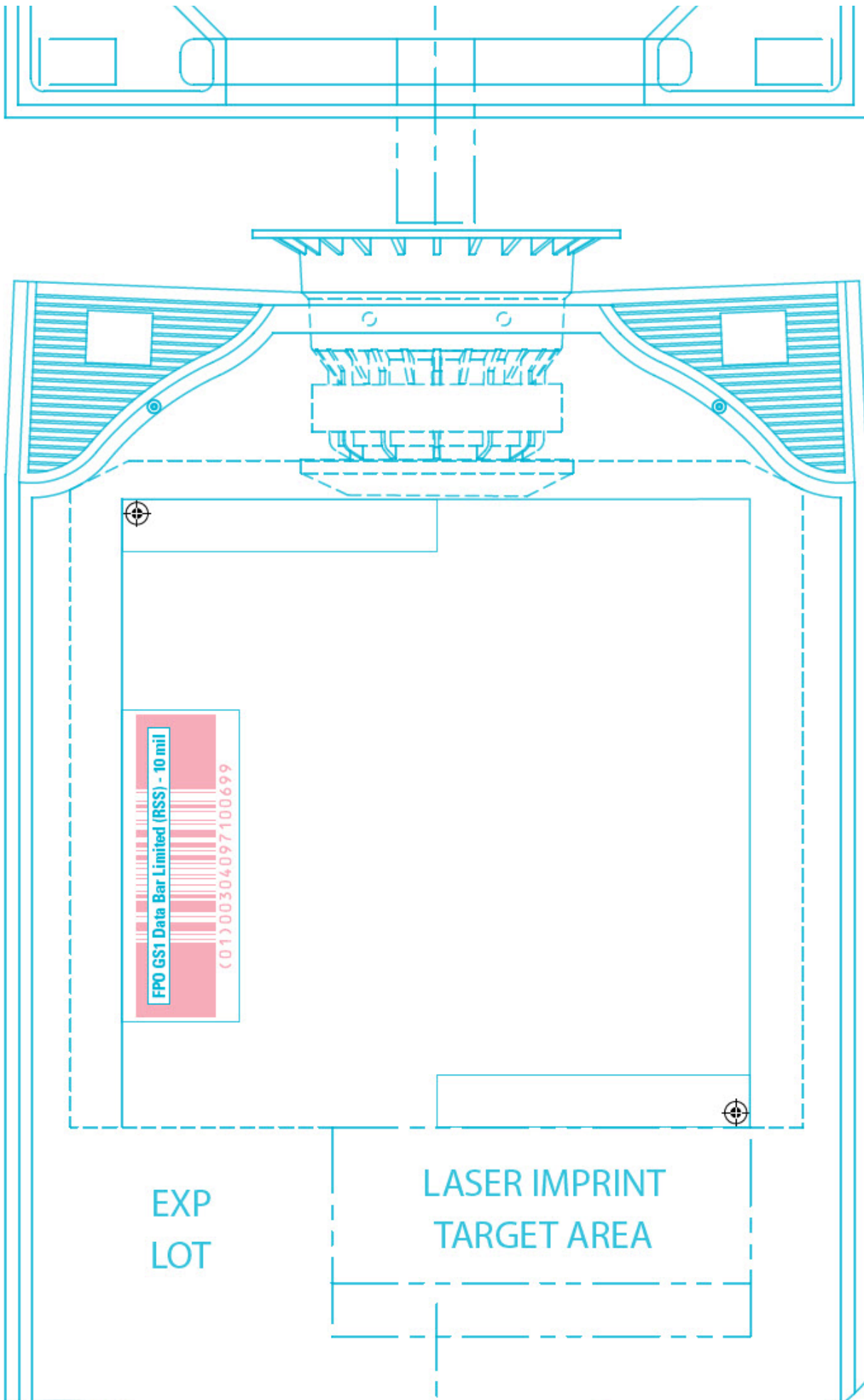
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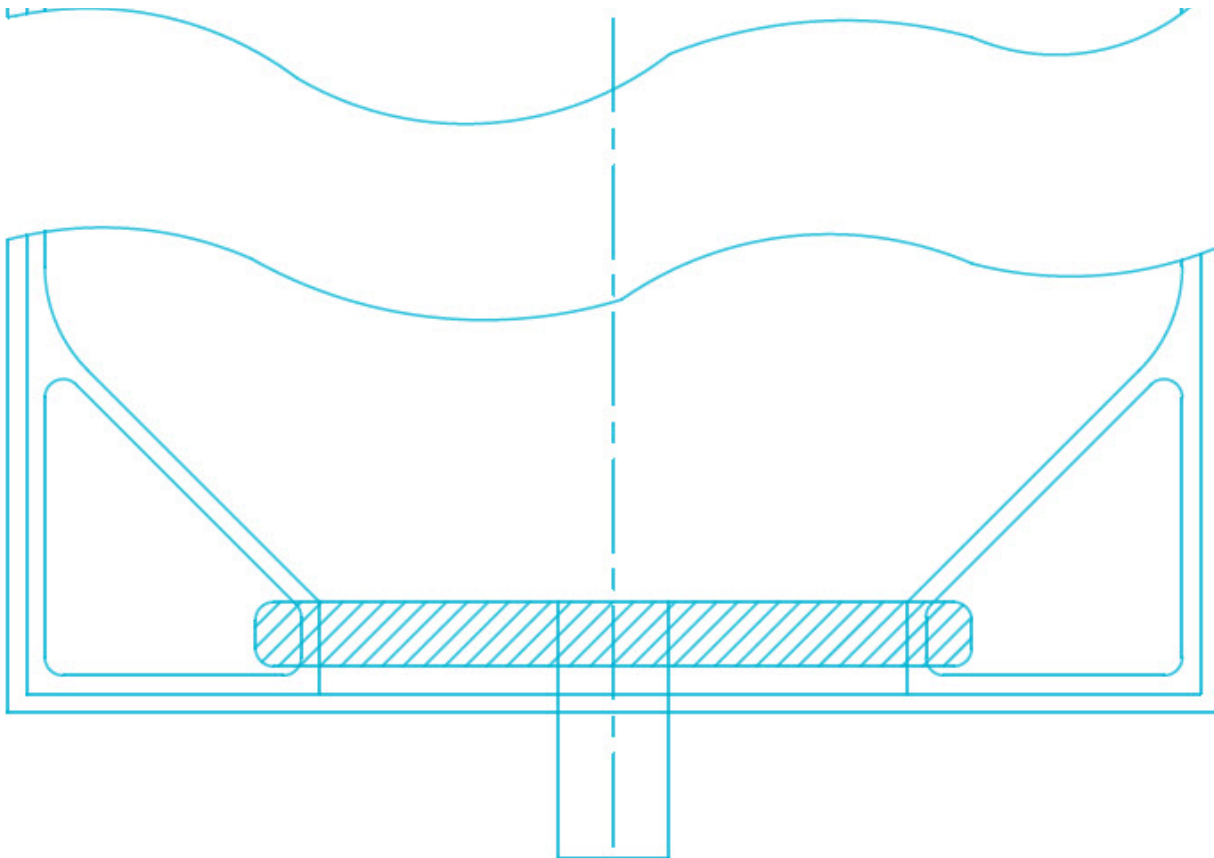
Rx ONLY

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EXP  
LOT

HOT STAMP LOT NO.  
AND EXP. DATE  
TARGET AREA





### **PRINCIPAL DISPLAY PANEL - 250 mL Bag Label**

LOT  
EXP.

PULL INNER PLUG/STOPPER  
AND MIX DRUG BEFORE USE

ADD-Vantage™ Unit  
NDC 0409-7100-04

5% DEXTROSE  
Injection, USP

250  
mL

EACH 100 mL CONTAINS  
DEXTROSE, HYDROUS 5 g.  
253 mOsmol/LITER (calc).  
pH 4.3 (3.2 TO 6.5)  
DEXTROSE SOLUTIONS  
WITHOUT SALTS SHOULD  
NOT BE USED IN BLOOD  
TRANSFUSIONS BECAUSE  
OF POSSIBLE ROULEAU  
FORMATION. FOR USE ONLY  
WITH ADD-Vantage™ SYSTEM  
COMPONENTS. SINGLE-  
DOSE CONTAINER. FOR  
INTRAVENOUS USE. USUAL  
DOSAGE: SEE INSERT. STERILE,  
NONPYROGENIC. USE ONLY

IF SOLUTION IS CLEAR AND  
CONTAINER IS UNDAMAGED.  
MUST NOT BE USED IN SERIES  
CONNECTIONS.

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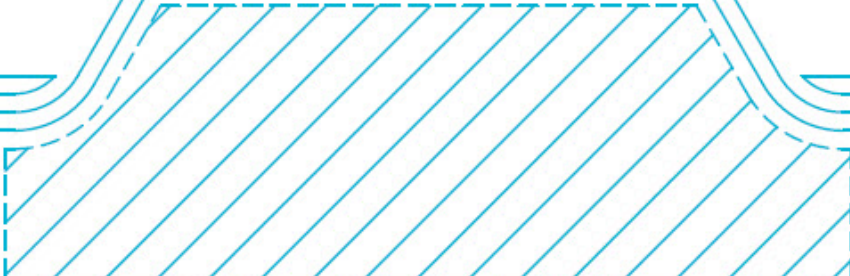
Hospira

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CONTAINS DEHP

IM-4482  
14475801



LOT



EXP.

**PULL INNER PLUG/STOPPER  
AND MIX DRUG BEFORE USE**

ADD-Vantage™ Unit

NDC 0409-7100-04

**5% DEXTROSE** **250**  
Injection, USP **mL**

NO COPY, NO INK

EACH 100 mL CONTAINS  
DEXTROSE, HYDROUS 5 g.  
253 mOsmol/LITER (calc).  
pH 4.3 (3.2 TO 6.5)  
DEXTROSE SOLUTIONS  
WITHOUT SALTS SHOULD  
NOT BE USED IN BLOOD  
TRANSFUSIONS BECAUSE  
OF POSSIBLE ROULEAU  
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WITH ADD-Vantage™ SYSTEM  
COMPONENTS. SINGLE-  
DOSE CONTAINER. FOR  
INTRAVENOUS USE. **USUAL  
DOSAGE: SEE INSERT.** STERILE,  
NONPYROGENIC. USE ONLY  
IF SOLUTION IS CLEAR AND  
CONTAINER IS UNDAMAGED.  
MUST NOT BE USED IN SERIES  
CONNECTIONS.

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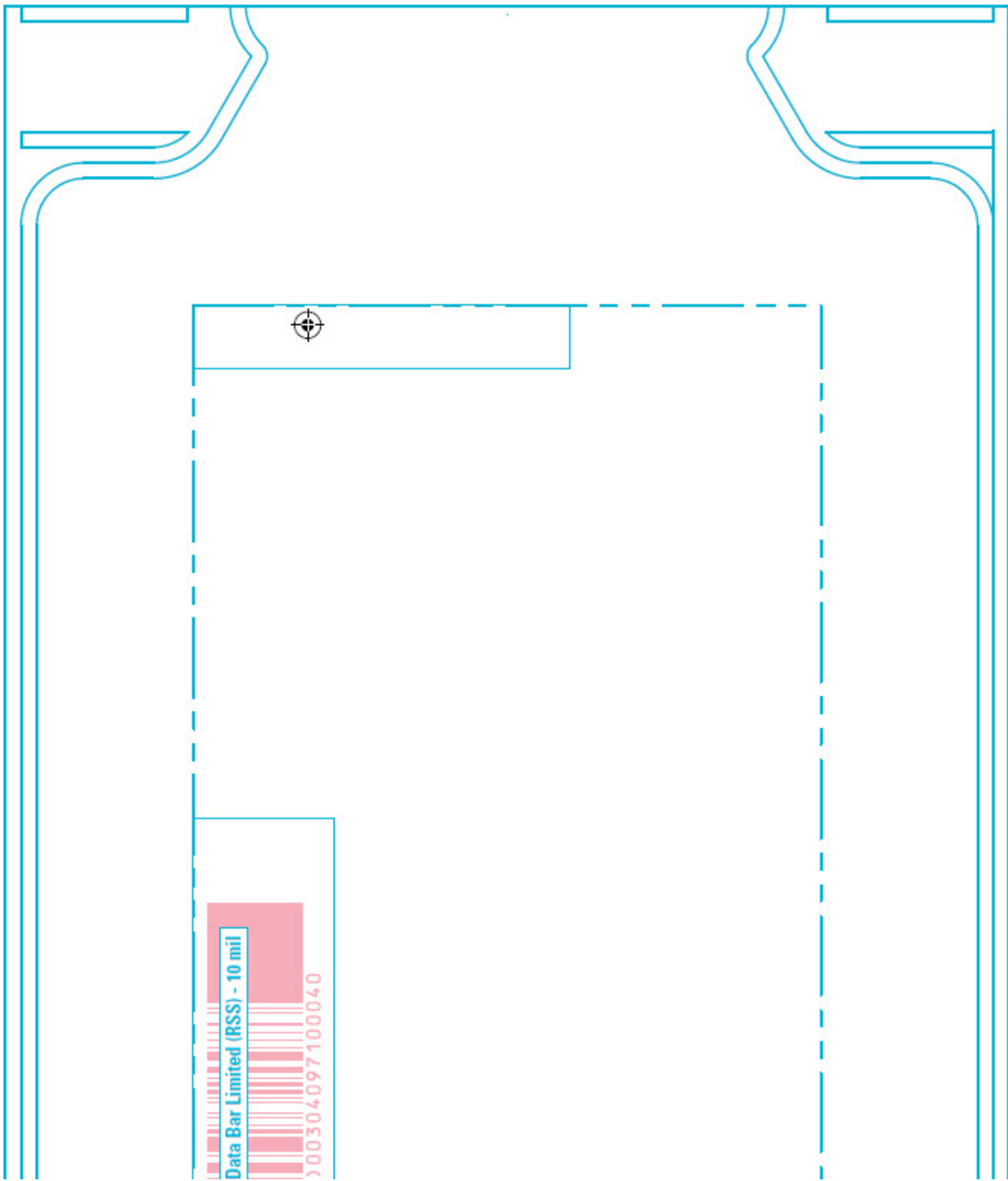
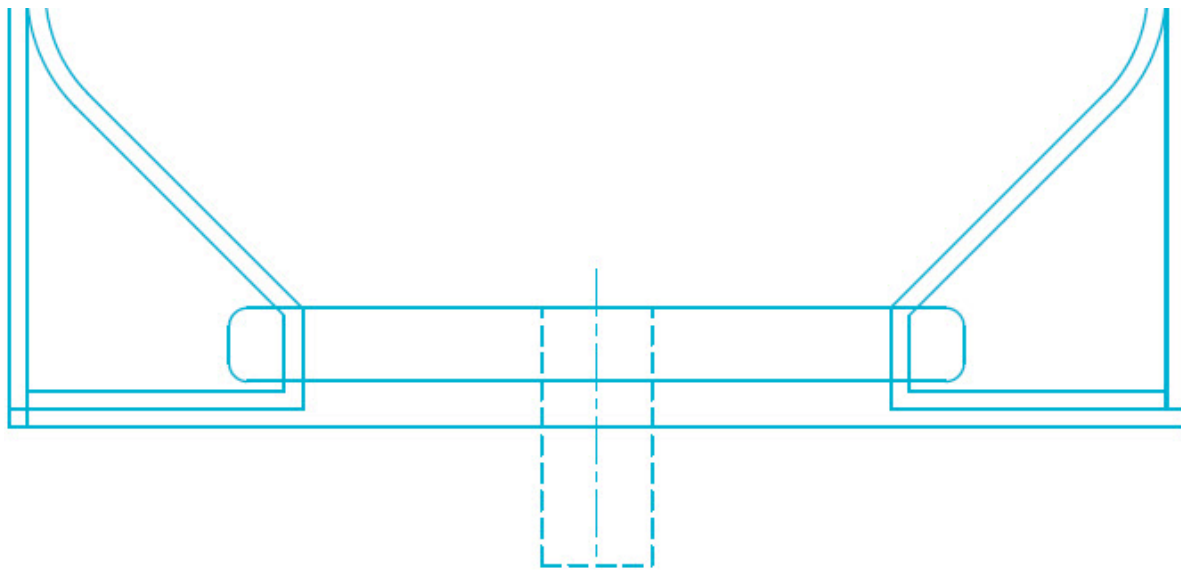


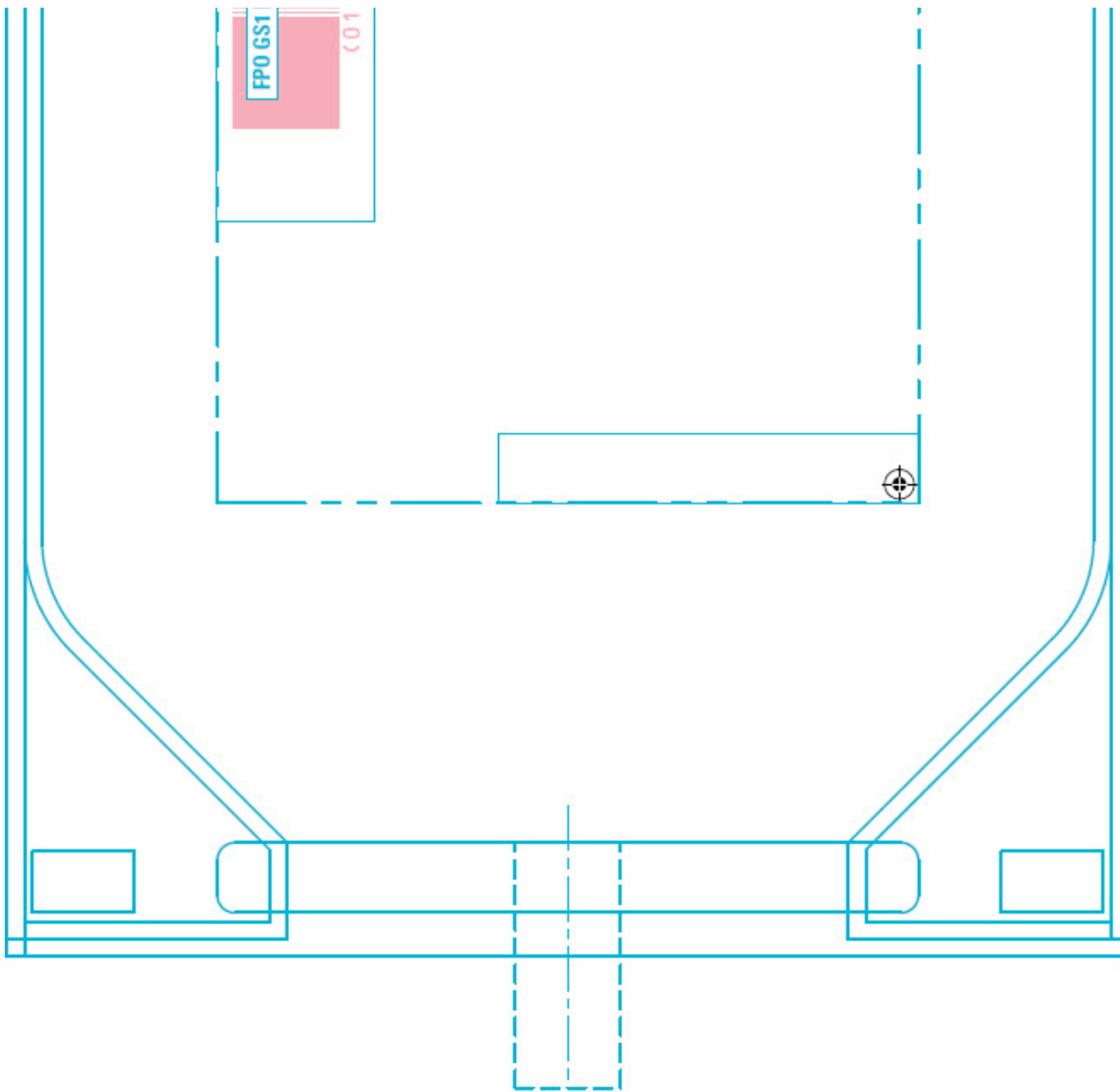
CONTAINS DEHP

IM-4482  
14475801









### **PRINCIPAL DISPLAY PANEL - OVERWRAP - WR-0583**

One/ADD-Vantage™ Unit

TO OPEN-PEEL AT CORNER

For use only with ADD-Vantage™ system components.

The overwrap is a moisture barrier. Use unit within 30 days of opening overwrap, as long as the use date does not exceed the printed expiration date. Store at 20 to 25°C (68 to 77°F). [See USP Controlled Room Temperature.] Protect from freezing. See insert. After removing the overwrap, check for minute leaks by squeezing container firmly. If leaks are found, discard unit as sterility may be impaired.

Rx only  
14475901

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WR-0583

## One/ADD-Vantage™ Unit TO OPEN–PEEL AT CORNER

For use only with ADD-Vantage™ system components.

The overwrap is a moisture barrier. Use unit within 30 days of opening overwrap, as long as the use date does not exceed the printed expiration date. Store at 20 to 25°C (68 to 77°F). [See USP Controlled Room Temperature.] Protect from freezing. See insert. After removing the overwrap, check for minute leaks by squeezing container firmly. If leaks are found, discard unit as sterility may be impaired.

Rx only 14475901

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WR-0583

### PRINCIPAL DISPLAY PANEL - OVERWRAP - WR-0581

TO OPEN - PEEL AT NOTCH

Five/ADD-Vantage™ Units

For use only with ADD-Vantage™ system components.

The overwrap is a moisture barrier. Use units within 30 days of opening overwrap, as long as the use date does not exceed the printed expiration date. After removing the overwrap, check for minute

leaks by squeezing container firmly. If leaks are found, discard unit as sterility may be impaired. Store at 20 to 25°C (68 to 77°F). [See USP Controlled Room Temperature.]

Rx only  
14475301

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Hospira

WR-0581

## TO OPEN – PEEL AT NOTCH Five/ADD-Vantage™ Units

For use only with ADD-Vantage™ system components.

The overwrap is a moisture barrier. Use units within 30 days of opening overwrap, as long as the use date does not exceed the printed expiration date. After removing the overwrap, check for minute leaks by squeezing container firmly. If leaks are found, discard unit as sterility may be impaired. Store at 20 to 25°C (68 to 77°F). [See USP Controlled Room Temperature.]

Rx only 14475301

Distributed by Hospira, Inc., Lake Forest, IL 60045 USA



WR-0581

# DEXTROSE

dextrose monohydrate injection, solution

## Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:0409-7100
<b>Route of Administration</b>	INTRAVENOUS		

## Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
<b>DEXTROSE MONOHYDRATE</b> (UNII: LX22YL083G) (ANHYDROUS DEXTROSE - UNII:5SLOG7R0OK)	DEXTROSE MONOHYDRATE	50 mg in 1 mL

## Inactive Ingredients

Ingredient Name	Strength
<b>WATER</b> (UNII: 059QF0K00R)	

## Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:0409-7100-66	10 in 1 CASE	08/04/2005	
1		5 in 1 POUCH		
1	NDC:0409-7100-68	50 mL in 1 BAG; Type 0: Not a Combination Product		
2	NDC:0409-7100-67	10 in 1 CASE	09/14/2005	
2		5 in 1 POUCH		
2	NDC:0409-7100-69	100 mL in 1 BAG; Type 0: Not a Combination Product		
3	NDC:0409-7100-02	12 in 1 CASE	06/27/2005	
3		2 in 1 POUCH		
3	NDC:0409-7100-04	250 mL in 1 BAG; Type 0: Not a Combination Product		

## Marketing Information

Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date
NDA	NDA019466	06/27/2005	

**Labeler** - Hospira, Inc. (141588017)

Revised: 10/2021

Hospira, Inc.