# **DEXTROSE-** dextrose monohydrate injection, solution **ProPharma** Distribution

-----

50% Dextrose Injection, USP Concentrated Dextrose for Intravenous Administration

NOTE: This solution is hypertonic - See WARNINGSand PRECAUTIONS.

LifeShield ® Abboject ® Syringe

Abboject ® Syringe

Fliptop Container

**Ansyr**<sup>®</sup>**II Plastic Syringe** Rx only

#### **DESCRIPTION**

50% Dextrose Injection, USP is a sterile, nonpyrogenic, hypertonic solution of dextrose in water for injection for intravenous injection as a fluid and nutrient replenisher.

Each mL of fluid contains 0.5 g dextrose, hydrous which delivers 3.4 kcal/gram. The solution has an osmolarity of 2.53 mOsmol/mL (calc.), pH 3.2 to 6.5 and may contain sodium hydroxide and/or hydrochloric acid for pH adjustment.

The solution contains no bacteriostat, antimicrobial agent or added buffer (except for pH adjustment) and is intended only for use as a single-dose injection. When smaller doses are required, the unused portion should be discarded with the entire unit.

Dextrose, USP is chemically designated C  $_6$ H  $_{12}$ O  $_6$ • H  $_2$ O (D-glucose monohydrate), a hexose sugar freely soluble in water.

Dextrose, hydrous has the following structural formula:

Water for Injection, USP is chemically designated H <sub>2</sub>O.

The syringe is molded from a specially formulated polypropylene. Water permeates from inside the container at an extremely slow rate which will have an insignificant effect on

solution concentration over the expected shelf life. 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 syringe material.

#### **CLINICAL PHARMACOLOGY**

When administered intravenously this solution restores blood glucose levels in hypoglycemia and provides a source of carbohydrate calories.

Carbohydrate in the form of dextrose may aid in minimizing liver glycogen depletion and exerts a protein-sparing action. Dextrose injection 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 requirement ranges 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 (Na <sup>+</sup>) plays a major role in maintaining physiologic equilibrium.

#### INDICATIONS AND USAGE

50% Dextrose Injection is indicated in the treatment of insulin hypoglycemia (hyperinsulinemia or insulin shock) to restore blood glucose levels.

The solution is also indicated, after dilution, for intravenous infusion as a source of carbohydrate calories in patients whose oral intake is restricted or inadequate to maintain nutritional requirements. Slow infusion of hypertonic solutions is essential to ensure proper utilization of dextrose and avoid production of hyperglycemia.

#### CONTRAINDICATIONS

A concentrated dextrose solution should not be used when intracranial or intraspinal hemorrhage is present, nor in the presence of delirium tremens if the patient is already dehydrated.

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

50% Dextrose Injection is hypertonic and may cause phlebitis and thrombosis at the site of injection.

Significant hyperglycemia and possible hyperosmolar syndrome may result from too rapid administration. The physician should be aware of the symptoms of hyperosmolar syndrome, such as mental confusion and loss of consciousness, especially in patients

with chronic uremia and those with known carbohydrate intolerance.

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

Additives may be incompatible. Consult with pharmacist if available. When introducing additives, use aseptic technique, mix thoroughly and do not store.

# For peripheral vein administration:

The solution should be given slowly, preferably through a small-bore needle into a large vein, to minimize venous irritation.

#### For central venous administration:

Concentrated dextrose should be administered via central vein only after suitable dilution.

### **PRECAUTIONS**

Do not use unless the solution is clear and seal is intact. Discard unused portion.

Electrolyte deficits, particularly in serum potassium and phosphate, may occur during prolonged use of concentrated dextrose solutions. Blood electrolyte monitoring is essential and fluid and electrolyte imbalances should be corrected. Essential vitamins and minerals also should be provided as needed.

To minimize hyperglycemia and consequent glycosuria, it is desirable to monitor blood and urine glucose and if necessary, add insulin.

When a concentrated dextrose infusion is abruptly withdrawn, it is advisable to follow with the administration of 5% or 10% dextrose injection to avoid rebound hypoglycemia.

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

Care should be exercised to ensure that the needle is well within the lumen of the vein and that extravasation does not occur. If thrombosis should occur during administration, the injection should be stopped and corrective measures instituted.

Concentrated dextrose solutions should not be administered subcutaneously or intramuscularly.

# Carcinogenesis, Mutagenesis, Impairment of Fertility:

Studies with solutions in polypropylene syringes 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 be given to a pregnant woman only if clearly needed.

# **Nursing Mothers**

It is not known whether this drug is excreted in human milk. Because many drugs are excreted in human milk, caution should be exercised when 50% Dextrose Injection, USP is administered to a nursing mother.

#### ADVERSE REACTIONS

Hyperosmolar syndrome, resulting from excessively rapid administration of concentrated dextrose may cause mental confusion and/or loss of consciousness.

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 during therapy, re-evaluate the patient and institute appropriate corrective measures. See **WARNINGS** and **PRECAUTIONS**.

#### DOSAGE AND ADMINISTRATION

# For peripheral vein administration:

Injection of the solution should be made slowly.

The maximum rate at which dextrose can be infused without producing glycosuria is 0.5 g/kg of body weight/hour. About 95% of the dextrose is retained when infused at a rate of 0.8 g/kg/hr.

In insulin-induced hypoglycemia, intravenous injection of 10 to 25 grams of dextrose (20 to 50 mL of 50% dextrose) is usually adequate. Repeated doses and supportive treatment may be required in severe cases. A specimen for blood glucose determination should be taken before injecting the dextrose. In such emergencies, dextrose should be administered promptly without awaiting pretreatment test results.

#### For central venous administration:

For total parenteral nutrition 50% Dextrose Injection, USP is administered by slow intravenous infusion (a) after admixture with amino acid solutions via an indwelling catheter with the tip positioned in a large central vein, preferably the superior vena cava, or (b) after dilution with sterile water for injection. Dosage should be adjusted to meet individual patient requirements.

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.

The maximum rate of dextrose administration which does not result in glycosuria is the same as cited above.

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

### **HOW SUPPLIED**

50% Dextrose Injection, USP is supplied in single-dose containers as follows:

NDC 84549-517-16

1 - 50 mL Ansyr ®II Plastic Syringe with syringe and barrel detached

25 g/50 mL (0.5 g/mL)

Exposure of pharmaceutical products to heat should be minimized. Avoid excessive heat. Protect from freezing. Store at 20 to 25°C (68 to 77°F). [See USP Controlled Room Temperature.]

Abboject ® is a trademark of Abbott Laboratories.

LifeShield ® is the trademark of ICU Medical, Inc. and is used under license.

For Medical Information about 50% Dextrose Injection, please visit www.pfizermedinfo.comor call 1-800-438-1985.

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

LAB-1027-7.0

Revised: July 2024

PRINCIPAL DISPLAY PANEL - 50 mL Syringe Label

# Dextrose IV Solution 0.5gm/mL

Injection USP Single Dose Syringe

50mL

For Intravenous use only.

Discard Unused Portion.

Store at 20 deg to 25 deg C (68 deg to 77 deg F) See USP Controlled Room Temp

**RX ONLY** 

Hospira, Inc. ORIG MFG LOT: XX-XXX-XX ORIG MFG NDC: 0409-7517-10

Manufacturer Information

\* 84549-517-16 \*

ITEM #: 84549 - 517 - 16

LOT: XXXXXXXXXX

EXP: MM - YY

Packaged By ProPharma Distribution LLC 11005 Dover St Unit 1000 Westminster, CO 80021 GTIN: (01)00384549517169

LOT: XX – XXX – XX EXP: MM – YY

SER: (21) XXXXXXXXXXXXX

SEE MANUFACTURER'S INSERT FOR COMPLETE PRODUCT AND PRESCRIBING INFORMATION



# **DEXTROSE**

dextrose monohydrate injection, solution

Product	information
---------	-------------

Product Type

HUMAN PRESCRIPTION DRUG

HUMAN PRESCRIPTION (Source)

NDC:84549-517(NDC:0409-7517)

Route of Administration INTRAVENOUS

# **Active Ingredient/Active Moiety**

Ingredient Name	<b>Basis of Strength</b>	Strength
DEXTROSE MONOHYDRATE (UNII: LX22YL083G) (ANHYDROUS DEXTROSE -	DEXTROSE	25 g
LINII: 5SLOG7DOK)	MONOHYDDATE	in 50 ml

# **Inactive Ingredients**

Ingredient Name	Strength		
WATER (UNII: 059QF0KO0R)			
SODIUM HYDROXIDE (UNII: 55X04QC32I)			
HYDROCHLORIC ACID (UNII: QTT17582CB)			

l	Packaging				
	#	Item Code	Package Description	Marketing Start Date	Marketing End Date
			50 mL in 1 SYRINGE, PLASTIC; Type 2: Prefilled Drug Delivery Device/System (syringe, patch, etc.)	06/23/2025	

Marketing Information				
Marketing Category	Application Number or Monograph Citation	Marketing Start Date	Marketing End Date	
NDA	NDA019445	12/02/2005		

# Labeler - ProPharma Distribution (883394285)

Establishment				
Name	Address	ID/FEI	Business Operations	
ProPharma Distribution		883394285	repack(84549-517), relabel(84549-517)	

Revised: 6/2025 ProPharma Distribution