

**SODIUM CHLORIDE - sodium chloride injection**  
**Fresenius Medical Care de Mexico, S.A. de C.V.**

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**0.9% Sodium Chloride Injection, USP**

**Flexible Plastic Container**

Rx only

**DESCRIPTION**

0.9% Sodium Chloride Injection, USP is sterile and nonpyrogenic. It is a parenteral solution containing 0.9% sodium chloride in water for injection intended for intravenous administration.

Each 100 mL of 0.9% Sodium Chloride Injection, USP contains 900 mg sodium chloride in water for injection. Electrolytes per 1000 mL: sodium 154 mEq; chloride 154 mEq. The osmolarity is 308 mOsmol/L (calc.).

The pH is 5.6. The pH range is 4.5 to 7.0.

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 a parenteral fluid and electrolyte replenisher.

Sodium Chloride, USP is chemically designated NaCl, a white crystalline powder freely soluble in water.

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

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°C (77°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 electrolytes.

Solutions which provide combinations of hypotonic or isotonic concentrations of sodium chloride are suitable for parenteral maintenance or replacement of water and electrolyte requirements.

Isotonic concentrations of sodium chloride are suitable for parenteral replacement of

chloride losses that exceed or equal the sodium loss.

Sodium chloride in water dissociates to provide sodium (Na<sup>+</sup>) and chloride (Cl<sup>-</sup>) ions. Sodium (Na<sup>+</sup>) is the principle cation of the extracellular fluid and plays a large part in the therapy of fluid and electrolyte disturbances. Chloride (Cl<sup>-</sup>) has an integral role in buffering action when oxygen and carbon dioxide exchange occurs in the red blood cells. The distribution and excretion of sodium (Na<sup>+</sup>) and chloride (Cl<sup>-</sup>) are largely under the control of the kidney which maintains a balance between intake and output.

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 (Na<sup>+</sup>) plays a major role in maintaining physiologic equilibrium.

## **INDICATIONS AND USAGE**

Intravenous solutions containing sodium chloride are indicated for parenteral replenishment of fluid and sodium chloride as required by the clinical condition of the patient.

## **CONTRAINDICATIONS**

None known.

## **WARNINGS**

0.9% Sodium Chloride Injection, USP should be used with great care, if at all, in patients with congestive heart failure, severe renal insufficiency and in clinical states in which there exists edema with sodium retention.

The intravenous administration of 0.9% Sodium Chloride Injection, USP can cause fluid and/or solute overloading resulting in dilution of serum electrolyte concentrations, overhydration, congested states or pulmonary edema.

The risk of dilutive states is inversely proportional to the electrolyte concentration of the injections. The risk of solute overload causing congested states with peripheral and pulmonary edema is directly proportional to the electrolyte concentrations of the injections.

In patients with diminished renal function, administration of 0.9% Sodium Chloride Injection, USP may result in sodium retention.

## **PRECAUTIONS**

### **General**

Do not use plastic containers in series connections. Such use could result in air

embolism due to residual air being drawn from the primary container before administration of the fluid from the secondary container is completed.

Pressurizing intravenous solutions contained in flexible plastic containers to increase flow rates can result in air embolism if the residual air in the container is not fully evacuated prior to administration.

Use of a vented intravenous administration set with the vent in the open position could result in air embolism. Vented intravenous administration sets with the vent in the open position should not be used with flexible plastic containers.

## **Laboratory Tests**

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.

## **DRUG INTERACTIONS**

Caution must be exercised in the administration of 0.9% Sodium Chloride Injection, USP to patients receiving corticosteroids or corticotropin.

## **Carcinogenesis, Mutagenesis, Impairment of Fertility**

Studies have not been performed with Sodium Chloride Injection, USP to evaluate the potential for carcinogenesis, mutagenesis or impairment of fertility.

## **Pregnancy:**

Teratogenic Effects

*Pregnancy Category C*

Animal reproduction studies have not been conducted with Sodium Chloride Injection, USP. It is also not known whether Sodium Chloride Injection, USP can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Sodium Chloride Injection, USP should be given to a pregnant woman only if clearly needed.

## **Labor and Delivery**

Studies have not been conducted to evaluate the effects of Sodium Chloride Injection, USP on labor and delivery. Caution should be exercised when administering this drug during labor and delivery.

## **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 Sodium Chloride Injection, USP is administered to a nursing mother.

## **Pediatric Use**

The use of Sodium Chloride Injection, USP in pediatric patients is based on clinical

practice.

Plasma electrolyte concentrations should be closely monitored in the pediatric population as this population may have impaired ability to regulate fluids and electrolytes.

### **Geriatric Use**

Clinical studies of Sodium Chloride Injection, USP did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently from younger subjects. Other reported clinical experience has not identified differences in responses between elderly and younger patients. In general, dose selection for an elderly patient should be cautious, usually starting at the low end of the dosing range, reflecting the greater frequency of decreased hepatic, renal, or cardiac function, and of concomitant disease or drug therapy.

This drug is known to be substantially excreted by the kidney, and the risk of toxic reactions to this drug may be greater in patients with impaired renal function. Because elderly patients are more likely to have decreased renal function, care should be taken in dose selection, and it may be useful to monitor renal function.

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

### **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 counter measures 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 upon the age, weight and clinical condition of the patient.

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

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

### **INSTRUCTIONS FOR USE**

## To Open

Tear outer wrap at notch and remove solution container. If supplemental medication is desired, follow directions below before preparing for administration. 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.

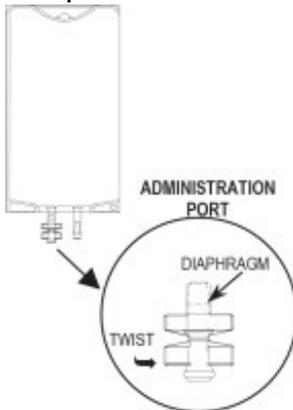
## To Add Medication

1. Prepare additive port.
2. Using aseptic technique and an additive delivery needle of appropriate length, puncture resealable additive port at target area, inner diaphragm and inject. Withdraw needle after injecting medication.
3. The additive port may be protected by covering with an additive cap.
4. Mix container contents thoroughly.

## Preparation for Administration

### (Use Aseptic Technique)

1. Close flow control clamp of administration set.
2. Remove cover from outlet port at bottom of container.
3. Insert piercing pin of administration set into port with a twisting motion until the set is firmly seated. **NOTE:** See full directions on administration set carton.
4. Suspend container from hanger.



5. Squeeze and release drip chamber to establish proper fluid level in chamber.
6. Open flow control clamp and clear air from set. Close clamp.
7. Attach set to venipuncture device. If device is not indwelling, prime and make venipuncture.
8. Regulate rate of administration with flow control clamp.

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

## HOW SUPPLIED

0.9% Sodium Chloride Injection, USP is supplied in a 1000 mL single-dose flexible plastic container.

(US manufactured NDC number 49230-300-10)

(Mexico manufactured NDC number 46163-300-10)

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



Fresenius Medical Care North America

Waltham, MA 02451

1-800-323-5188

Printed in Mexico

E881 REV 03/15

**Package Label - Principal Display Panel - 0.9% Sodium Chloride Injection, USP  
Bag Label**

The image shows a principal display panel for a 0.9% Sodium Chloride Injection, USP bag label. The label is rectangular with rounded corners and a blue border. On the left side, there is a vertical barcode with the number (01) 003 46163 300 10 7 printed vertically next to it. The top of the label features the Fresenius Medical Care logo and the text 'Fresenius Medical Care'. Below this, the product information is listed: 'CAT NO. 060 -10109 1000mL' and 'NDC 46163-300-10'. The main product name is '0.9% Sodium Chloride Injection, USP', with '0.9%' in a larger font. To the right of the product name, there are horizontal lines with numbers 1 through 9, indicating a scale or measurement. Below the product name, the label provides detailed information: 'Each 100 mL contains: SODIUM CHLORIDE, USP - 900 mg WATER FOR INJECTION, USP - qs'. It also lists 'Approximate Electrolytes Per 1000 mL: Sodium 154 mEq Chloride 154 mEq', '308 mOsmol/Liter (calculated)', and 'pH 5.6 (4.5 - 7.0)'. The label is marked as 'STERILE AND NONPYROGENIC SINGLE DOSE CONTAINER' and includes instructions: 'Additives may be incompatible. Consult with pharmacist, if available. When introducing additives, use aseptic technique, mix thoroughly, do not store.' It also states 'USE ASEPTIC TECHNIQUE FOR INTRAVENOUS USE' and 'Usual dosage and directions: See Insert.' A 'CAUTIONS' section follows: 'Use only if solution is clear and container is undamaged. Squeeze and inspect inner bag. Discard if leaks are found. Do not use in series connections. Discard any unused portion. Read package insert for full information.' Storage instructions are provided: 'Store in overwrap at 20° - 25°C (68° - 77°F) [see USP Controlled Room Temperature] until ready to use. Avoid Excessive Heat. Protect From Freezing. See Insert'. At the bottom, it is marked 'Rx Only' and 'Latex Free', with the revision 'M015 Rev 06/09'. The manufacturer information is: 'Manufactured by Fresenius Medical Care North America, Waltham, MA 02451, 1-800-323-5188, Made in Mexico'.

# SODIUM CHLORIDE

sodium chloride injection

## Product Information

<b>Product Type</b>	HUMAN PRESCRIPTION DRUG	<b>Item Code (Source)</b>	NDC:46163-300
<b>Route of Administration</b>	INTRAVENOUS		

## Active Ingredient/Active Moiety

Ingredient Name	Basis of Strength	Strength
<b>SODIUM CHLORIDE</b> (UNII: 451W47IQ8X) (SODIUM CATION - UNII:LYR4M0NH37, CHLORIDE ION - UNII:Q32ZN48698)	SODIUM CHLORIDE	900 mg in 100 mL

## Inactive Ingredients

Ingredient Name	Strength
<b>WATER</b> (UNII: 059QF0KO0R)	

## Packaging

#	Item Code	Package Description	Marketing Start Date	Marketing End Date
1	NDC:46163-300-10	12 in 1 CARTON	04/12/2007	
1		1000 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
ANDA	ANDA078177	04/12/2007	

**Labeler** - Fresenius Medical Care de Mexico, S.A. de C.V. (812652287)

Revised: 10/2023

Fresenius Medical Care de Mexico, S.A. de C.V.