



**Attachment 2**  
**Draft Package Insert**

Sodium Chloride.qxd 6/21/06 4:29 PM Page 1

**0.9% SODIUM CHLORIDE**  
Injection, USP Rx only

**Twist-Top Plastic Vial**

**DESCRIPTION**

This preparation is designed solely for parenteral use only after addition of drugs that require dilution or must be dissolved in an aqueous vehicle prior to injection.

0.9% Sodium Chloride Injection, USP is a sterile, nonpyrogenic, isotonic solution of sodium chloride and water for injection. Each mL contains sodium chloride 9 mg. It contains no bacteriostatic, antimicrobial agent of added buffer and is supplied only in single-dose containers to dilute or dissolve drugs for injection. 0.308 mOsmol/mL (calc.). The solution may contain hydrochloric acid and/or sodium hydroxide for pH adjustment. pH 5.3 (4.5 to 7.0).

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

The semi-rigid vial is fabricated from polypropylene. The safety of the plastic has been confirmed by tests in animals according to USP biological standards for plastic containers. The container requires no vapor barrier to maintain the proper drug concentration.

**CLINICAL PHARMACOLOGY**

Sodium chloride in water dissociates to provide sodium (Na<sup>+</sup>) and chloride (Cl<sup>-</sup>) ions. These ions are normal constituents of the body fluids (principally extracellular) and are essential for maintaining electrolyte balance.

 Cardinal Health

Division of Dockets Management

Re: Suitability Petition for 3-, 5-, 15-, and 30-mL

0.9% Sodium Chloride Injection, USP

June 30, 2006

Page 6

Sodium Chlor.qxd 6/21/06 4:29 PM Page 2

The distribution and excretion of sodium ( $\text{Na}^+$ ) and chloride ( $\text{Cl}^-$ ) are largely under the control of the kidney which maintains a balance between intake and output.

The small volume of fluid and amount of sodium chloride provided by 0.9% Sodium Chloride Injection, USP when used only as an isotonic vehicle for parenteral drugs, is unlikely to exert a significant effect on fluid and electrolyte balance except possibly in neonates and very small infants.

Water is an essential constituent of all body tissues and accounts for approximately 70% of total body weight. Average normal adult daily 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 ( $\text{Na}^+$ ) plays a major role in maintaining physiologic equilibrium.

#### INDICATIONS AND USAGE

This parenteral preparation is indicated only for diluting and dissolving drugs for intravenous, intramuscular or subcutaneous injection, according to instructions of the manufacturer of the drug to be administered.

#### PRECAUTIONS

Consult the manufacturer's instructions for choice of vehicle, appropriate dilution or volume for dissolving the drugs to be injected, including the route and rate of injection.

Inspect reconstituted (diluted or dissolved) drugs for clarity (if soluble) and freedom from unexpected precipitation or discoloration prior to administration.

*Pregnancy Category C.* Animal reproduction studies have not been conducted with 0.9% Sodium Chloride Injection, USP. It is also not known whether sodium chloride injection containing additives can cause fetal harm when administered to a pregnant woman or can affect reproduction capacity. Sodium chloride injection containing additives should be given to a pregnant woman only if clearly needed.

*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.

**Drug Interactions**

Some drugs for injection may be incompatible in a given vehicle, or when combined in the same vehicle or in a vehicle containing benzyl alcohol. Consult with a pharmacist, if available.

Use aseptic technique for single or multiple entry and withdrawal from all containers.

When diluting or dissolving drugs, mix thoroughly and use promptly.

Do not store reconstituted solutions of drugs for injection unless otherwise directed by the manufacturer of the solute.

Do not use unless the solution is clear and twist-top integral. Do not reuse single-dose containers. discard unused portion.

**ADVERSE REACTIONS**

Reactions which may occur because of this solution, added drugs or the technique of reconstitution or administration include febrile response, local tenderness, abscess, tissue necrosis or infection at the site of injection, venous thrombosis or phlebitis extending from the site of injection and extravasation.

If an adverse reaction does occur, discontinue the infusion, evaluate the patient, institute appropriate countermeasures, and if possible, retrieve and save the remainder of the unused vehicle for examination.

**OVERDOSAGE**

Use only as a diluent or solvent. This parenteral preparation is unlikely to pose a threat of carbohydrate, sodium chloride or fluid overload, except possibly in neonates or very small infants. In the event these should occur, re-evaluate the patient and institute appropriate corrective measures. See PRECAUTIONS and ADVERSE REACTIONS.

Division of Dockets Management

Re: Suitability Petition for 3-, 5-, 15-, and 30-mL

0.9% Sodium Chloride Injection, USP

June 30, 2006

Page 8

Sodium Chloride.qxd 6/21/06 4:29 PM Page 4

**DOSAGE AND ADMINISTRATION**

The volume of the preparation to be used for diluting or dissolving any drug for injection, is dependent on the vehicle concentration, dose and route of administration as recommended by the manufacturer. This parenteral should be inspected visually for particulate matter and discoloration prior to administration, whenever solution and container permit.

**HOW SUPPLIED**

0.9% Sodium Chloride Injection, USP is supplied in the following:

<b>Container</b>	<b>Size</b>
Twist-Top Plastic Vial	3mL
Twist-Top Plastic Vial	5mL
Twist-Top Plastic Vial	10mL
Twist-Top Plastic Vial	15mL
Twist-Top Plastic Vial	20mL
Twist-Top Plastic Vial	30mL
Twist-Top Plastic Vial	50mL

Containers intended for use with the SmartSite<sup>®</sup> Vial Adapter.

Store at controlled room temperature 15 to 30°C (59 to 86°F)  
[See USP Controlled Room Temperature.]

Manufactured By:  
Cardinal Health  
2200 Lake Shore Drive  
Woodstock, IL 60098 USA