



## MATERIAL SAFETY DATA SHEET

While we believe the information provided herein is accurate and current, JHP Pharmaceuticals makes no representation or warranties, either explained or implied, and assume no responsibility for any damage or injuries of any kind, which may result from use or reliance upon this information

<b>SECTION 1</b>	<b>MATERIAL IDENTIFICATION</b>
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**PRODUCT NAME:** Adrenalin<sup>®</sup> (epinephrine for injection, USP)  
Adrenalin<sup>®</sup> Chloride Nasal Solution (epinephrine nasal solution, USP)

**DATE OF ISSUE:** 6/3/2013                      **SUPERCEDES:** 4/15/2013                      **REVISION:** 5.0

**FORMULA:** C<sub>9</sub>H<sub>13</sub>NO<sub>3</sub> (Epinephrine)

**SYNONYMS:** Epinephrine Chloride Solution

**NDC #:** 42023-159-25 Adrenalin<sup>®</sup> (epinephrine for injection, USP), 1mg/mL, 1mL SUV (Pack 25)  
42023-103-01 Adrenalin<sup>®</sup> Chloride Nasal Solution (epinephrine nasal solution, USP), 1mg/mL, 1oz Bottle (Pack 1)

<b>MANUFACTURING DIVISION:</b> JHP Pharmaceuticals, LLC	<b>ADDRESS:</b> 870 Parkdale Road Rochester, MI 48307	<b>PHONE :</b> CHEMTREC: 1-800-424-9300 Medical Affairs: 1-866-923-2547
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<b>SECTION 2</b>	<b>INGREDIENT(S)</b>
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**CAS #:** 51-43-3    **INGREDIENT NAME:** Epinephrine chloride

**EXPOSURE LIMITS/ GUIDELINES**  
OSHA PEL: N/A  
ACGIH TLV: N/A  
OTHER: N/A  
LISTED AS CARCINOGEN: No

<b>SECTION 3</b>	<b>HAZARD IDENTIFICATION</b>
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Therapeutic Class: Sympathomimetic

**POTENTIAL HEALTH EFFECTS:** Refer to packaging insert. Like other sympathomimetic agents, adverse effects may include fear, anxiety, restlessness, tremors, insomnia, confusion, irritability, headache, palpitations, vasoconstriction, nausea and vomiting.

<b>SECTION 4</b>	<b>FIRST AID INFORMATION</b>
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**INGESTION:** Seek medical attention.

**EYES:** Flush eyes with plenty of water for at least 15 minutes. Seek medical attention.

**SKIN:** Wash skin with soap and water for at least 15 minutes while removing contaminated clothing and shoes. Seek medical attention.

**INHALATION:** If adverse effects occur, remove to uncontaminated area. Seek medical attention.

## SECTION 5

## FIRE AND EXPLOSION DATA

**FLASH POINT AND METHOD:** ND

**EXTINGUISHING MEDIUM:** Carbon Dioxide, Regular Dry Chemical, Regular Foam, Water

**SPECIAL FIRE PROCEDURES:** Move container from fire area if it can be done without risk. Avoid inhalation of material or combustion by-products. Stay upwind and keep out of low areas. Use approved self-contained breathing apparatus.

**HAZARDOUS DECOMPOSITION OR COMBUSTION PRODUCTS:** Oxides of Carbon

**FIRE HAZARDS:** ND

**EXPLOSION HAZARDS:** NA

## SECTION 6

## ACCIDENTAL RELEASE MEASURES

**ACTION TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:** Prevent exposure. Contain spill without personal risk. Wipe or mop up spill and place in appropriate container for disposal.

## SECTION 7

## HANDLING AND STORAGE

**STORAGE:** Store and handle in accordance with all current regulations and standards. Store between 20° to 25°C (68° to 77°F). [See USP Controlled Room Temperature]. Protect from light and freezing. See original container for storage recommendations. Keep separated from incompatible substances.

## SECTION 8

## SPECIAL PROTECTION INFORMATION

**VENTILATION:** No special requirements under normal conditions.

**EYE PROTECTION:** Wear splash resistant safety goggles. Provide an emergency eyewash fountain and quick drench shower in the immediate work area.

**CLOTHING:** Wear appropriate chemical resistant clothing.

**GLOVES:** Wear appropriate chemical resistant gloves.

**RESPIRATOR:** No respirator is required under normal conditions of use. Ensure compliance with applicable exposure limits.

## SECTION 9

## PHYSICAL AND CHEMICAL DATA

**PHYSICAL STATE:** Liquid

**SPECIFIC GRAVITY:** 1.002 (Water = 1.0)

**APPEARANCE:** Clear

**pH:** 2.5 – 4.5 @ 25°C

**CHARACTERISTIC ODOR:** None

**OTHER:** NA

**SOLUBILITY:** Slightly in water

**SECTION 10 STABILITY AND REACTIVITY**

**REACTIVITY:** Stable and normal temperatures and pressures.

**CONDITIONS TO AVOID:** Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.

**SECTION 11 TOXICOLOGY**

**TOXICITY INFORMATION:**

The following information pertains to the ingredient(s) individually and not to the product as marked. Included will be any data which emphasizes the potential effects that may occur with the occupational handling (by inhalation or by dermal or by ocular contact) of this product.

**Epinephrine:** Rat I.V. LD<sub>50</sub>: 0.15 mg/kg; Mouse I.V. LD<sub>50</sub>: 0.217 mg/kg; Rat Oral LD<sub>10</sub>: 30 mg/kg;

(Refer to package insert for further information)

**SECTION 12 ECOLOGICAL INFORMATION**

ND

**SECTION 13 DISPOSAL**

Dispose of in accordance with all applicable regulations.

**SECTION 14 TRANSPORTATION INFORMATION**

**PROPER SHIPPING NAME:** Non-Regulated

**ID/UN NUMBER:** NA

**CONTAINER SPECIFICATION:** NA

**HAZARD CLASS:** NA

**LABEL:** NA

N/A – NOT APPLICABLE

ND – NO DATA FOUND

The information provided in this Material Safety Data Sheet has been compiled from our experience and the data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of safety precautions as may be necessary. We reserve the right to revise the Material Safety Data Sheets from time to time as new information becomes available. The user has the responsibility to contact the company to make sure the sheet is the latest one issued.