

# Cefotaxime Sodium Salt

sc-202989

Material Safety Data Sheet



The Power is Question

Hazard Alert Code Key:

EXTREME

HIGH

MODERATE

LOW

## Section 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

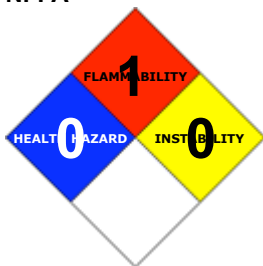
### PRODUCT NAME

Cefotaxime Sodium Salt

### STATEMENT OF HAZARDOUS NATURE

CONSIDERED A HAZARDOUS SUBSTANCE ACCORDING TO OSHA 29 CFR 1910.1200.

### NFPA



### SUPPLIER

Santa Cruz Biotechnology, Inc.  
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800.457.3801 or 831.457.3800

### EMERGENCY

ChemWatch  
Within the US & Canada: 877-715-9305  
Outside the US & Canada: +800 2436 2255  
(1-800-CHEMCALL) or call +613 9573 3112

### SYNONYMS

"C16H17N5O7S2 .Na", "(6R-(6alpha, 7beta(Z)))-3-((acetyloxy)methyl)-7-(((2-amino-4-", thiazolyl)methoxyimino)acetyl)amino)-8-oxo-5-thia-1-azabicyclo[4.2.0]oct-2-, "ene-2-carboxylic acid sodium salt", "sodium 7-(2-(2-amino-4-thiazolyl)-2-", "methoxyiminoacetamido)cephalosporanate sodium [6R-[6alpha, 7beta(Z)]]-3-", (acetoxymethyl)-7-[(2-aminothiazol-4-yl)(methoxyimino)acetamido]-8-oxo-, 5-thia-1-azabicyclo[4.2.0]oct-2-ene-2-carboxylate, "cefatoxime sodium", Claforan, CTX, HR-756, RU-24756, Chemsef, Macrosef, Pretor, Tolyar, "cephalosporin antibiotic"

## Section 2 - HAZARDS IDENTIFICATION

### CHEMWATCH HAZARD RATINGS

|               |   | Min                    | Max                 |
|---------------|---|------------------------|---------------------|
| Flammability: | 1 | <div><div></div></div> |                     |
| Toxicity:     | 2 | <div><div></div></div> |                     |
| Body Contact: | 0 | <div><div></div></div> | Min/Nil=0<br>Low=1  |
| Reactivity:   | 1 | <div><div></div></div> | Moderate=2          |
| Chronic:      | 2 | <div><div></div></div> | High=3<br>Extreme=4 |

### CANADIAN WHMIS SYMBOLS



## EMERGENCY OVERVIEW

### RISK

### POTENTIAL HEALTH EFFECTS

#### ACUTE HEALTH EFFECTS

##### SWALLOWED

- Accidental ingestion of the material may be damaging to the health of the individual.
- The most common side effects of cephalosporins include acute, life-threatening kidney failure. Neurological symptoms may occur.

##### EYE

- Although the material is not thought to be an irritant, direct contact with the eye may cause transient discomfort characterized by tearing or conjunctival redness (as with windburn). Slight abrasive damage may also result.

##### SKIN

- The material is not thought to produce adverse health effects or skin irritation following contact (as classified using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable gloves be used in an occupational setting.
- Open cuts, abraded or irritated skin should not be exposed to this material.
- Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.

##### INHALED

- The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified using animal models). Nevertheless, adverse effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.
- Persons with impaired respiratory function, airway diseases and conditions such as emphysema or chronic bronchitis, may incur further disability if excessive concentrations of particulate are inhaled.

#### CHRONIC HEALTH EFFECTS

- Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.
- There is some evidence that inhaling this product is more likely to cause a sensitization reaction in some persons compared to the general population.
- There is limited evidence that, skin contact with this product is more likely to cause a sensitization reaction in some persons compared to the general population.
- Long term exposure to high dust concentrations may cause changes in lung function i.e. pneumoconiosis; caused by particles less than 0.5 micron penetrating and remaining in the lung.
- Exposure to small quantities may induce hypersensitivity reactions characterized by acute bronchospasm, hives (urticaria), deep dermal wheals (angioneurotic edema), running nose (rhinitis) and blurred vision. Anaphylactic shock and skin rash (non-thrombocytopenic purpura) may occur.
- Prolonged use of cephalosporins may result in resistance and super-infection of non-susceptible organisms, rarely resulting in intestinal inflammation. Loss of white blood cells and platelets have been reported; side effects are more common in those with pre-existing liver and kidney damage.

## Section 3 - COMPOSITION / INFORMATION ON INGREDIENTS

| NAME              | CAS RN     | %   |
|-------------------|------------|-----|
| cefotaxime sodium | 64485-93-4 | >98 |

## Section 4 - FIRST AID MEASURES

##### SWALLOWED

· If swallowed do NOT induce vomiting. · If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.

##### EYE

- If this product comes in contact with the eyes: · Wash out immediately with fresh running water. · Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.

##### SKIN

- If skin contact occurs: · Immediately remove all contaminated clothing, including footwear · Flush skin and hair with running water (and soap if available).

##### INHALED

· If dust is inhaled, remove from contaminated area. · Encourage patient to blow nose to ensure clear passage of breathing. · If irritation or discomfort persists seek medical attention.

#### NOTES TO PHYSICIAN

■ Treat symptomatically.

About 40% is bound to plasma proteins. Elimination half-life is about 1.2 hours. Widely distributed in body tissues and fluids including inflamed cerebrospinal fluids. About 80% of the dose is recovered in the urine within 24 hours (both unchanged and as the desacetyl metabolite). Also excreted in the bile.

### Section 5 - FIRE FIGHTING MEASURES

|                             |                |
|-----------------------------|----------------|
| Vapour Pressure (mmHG):     | Negligible     |
| Upper Explosive Limit (%):  | Not available. |
| Specific Gravity (water=1): | Not available  |
| Lower Explosive Limit (%):  | Not available  |

#### EXTINGUISHING MEDIA

· Water spray or fog.  
· Foam.

#### FIRE FIGHTING

· Alert Emergency Responders and tell them location and nature of hazard.  
· Wear breathing apparatus plus protective gloves.

#### GENERAL FIRE HAZARDS/HAZARDOUS COMBUSTIBLE PRODUCTS

· Combustible solid which burns but propagates flame with difficulty.  
· Avoid generating dust, particularly clouds of dust in a confined or unventilated space as dusts may form an explosive mixture with air, and any source of ignition, i.e. flame or spark, will cause fire or explosion. Dust clouds generated by the fine grinding of the solid are a particular hazard; accumulations of fine dust may burn rapidly and fiercely if ignited.  
Combustion products include: carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), sulfur oxides (SO<sub>x</sub>), other pyrolysis products typical of burning organic material.  
May emit poisonous fumes.  
May emit corrosive fumes.

#### FIRE INCOMPATIBILITY

■ Avoid contamination with oxidizing agents i.e. nitrates, oxidizing acids, chlorine bleaches, pool chlorine etc. as ignition may result.

#### PERSONAL PROTECTION

Glasses:  
Chemical goggles.  
Gloves:  
Respirator:  
Particulate

### Section 6 - ACCIDENTAL RELEASE MEASURES

#### MINOR SPILLS

· Clean up waste regularly and abnormal spills immediately.  
· Avoid breathing dust and contact with skin and eyes.  
· Wear protective clothing, gloves, safety glasses and dust respirator.  
· Use dry clean up procedures and avoid generating dust.  
· Vacuum up or sweep up. NOTE: Vacuum cleaner must be fitted with an exhaust micro filter (HEPA type) (consider explosion-proof machines designed to be grounded during storage and use).  
· Dampen with water to prevent dusting before sweeping.  
· Place in suitable containers for disposal.

#### MAJOR SPILLS

■ Moderate hazard.  
· CAUTION: Advise personnel in area.  
· Alert Emergency Responders and tell them location and nature of hazard.

### Section 7 - HANDLING AND STORAGE

#### PROCEDURE FOR HANDLING

· Avoid all personal contact, including inhalation.  
· Wear protective clothing when risk of exposure occurs.  
Empty containers may contain residual dust which has the potential to accumulate following settling. Such dusts may explode in the presence of an appropriate ignition source.  
· Do NOT cut, drill, grind or weld such containers.  
· In addition ensure such activity is not performed near full, partially empty or empty containers without appropriate workplace safety authorisation or permit.

#### RECOMMENDED STORAGE METHODS

- Glass container.
- Polyethylene or polypropylene container.
- Check all containers are clearly labelled and free from leaks.

#### **STORAGE REQUIREMENTS**

- Store in original containers.
- Keep containers securely sealed.

## **Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION**

### **EXPOSURE CONTROLS**

The following materials had no OELs on our records

- cefotaxime sodium: CAS:64485-93-4

### **PERSONAL PROTECTION**



#### **RESPIRATOR**

- particulate.
- Consult your EHS staff for recommendations

#### **EYE**

- Safety glasses with side shields.
- Chemical goggles.

#### **HANDS/FEET**

■ **NOTE:** The material may produce skin sensitization in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.

Suitability and durability of glove type is dependent on usage. Important factors in the selection of gloves include: such as:

- frequency and duration of contact,
- chemical resistance of glove material,
- glove thickness and
- dexterity

Select gloves tested to a relevant standard (e.g. Europe EN 374, US F739).

· When prolonged or frequently repeated contact may occur, a glove with a protection class of 5 or higher (breakthrough time greater than 240 minutes according to EN 374) is recommended.

· When only brief contact is expected, a glove with a protection class of 3 or higher (breakthrough time greater than 60 minutes according to EN 374) is recommended.

· Contaminated gloves should be replaced.

Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.

Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.

- polychloroprene
- nitrile rubber
- butyl rubber
- fluorocautchouc
- polyvinyl chloride

Gloves should be examined for wear and/ or degradation constantly.

#### **OTHER**

- Overalls.
- P.V.C. apron.
- Barrier cream.
- Skin cleansing cream.
- Eye wash unit.

### **ENGINEERING CONTROLS**

- Local exhaust ventilation is required where solids are handled as powders or crystals; even when particulates are relatively large, a certain proportion will be powdered by mutual friction.
- Exhaust ventilation should be designed to prevent accumulation and recirculation of particulates in the workplace.

## **Section 9 - PHYSICAL AND CHEMICAL PROPERTIES**

### **PHYSICAL PROPERTIES**

Solid.

Mixes with water.

|                           |                |                                |                |
|---------------------------|----------------|--------------------------------|----------------|
| State                     | Divided solid  | Molecular Weight               | 477.4          |
| Melting Range (°F)        | Not available  | Viscosity                      | Not Applicable |
| Boiling Range (°F)        | Not available  | Solubility in water (g/L)      | Miscible       |
| Flash Point (°F)          | Not available  | pH (1% solution)               | 5.5 (10% soln) |
| Decomposition Temp (°F)   | Not available  | pH (as supplied)               | Not applicable |
| Autoignition Temp (°F)    | Not available  | Vapour Pressure (mmHG)         | Negligible     |
| Upper Explosive Limit (%) | Not available. | Specific Gravity (water=1)     | Not available  |
| Lower Explosive Limit (%) | Not available  | Relative Vapor Density (air=1) | Not Applicable |
| Volatile Component (%vol) | Negligible     | Evaporation Rate               | Not applicable |

## APPEARANCE

Odourless white or slightly yellow powder; mixes with water.

## Section 10 - CHEMICAL STABILITY

### CONDITIONS CONTRIBUTING TO INSTABILITY

- Presence of incompatible materials.
- Product is considered stable.

### STORAGE INCOMPATIBILITY

- Avoid reaction with oxidizing agents.

For incompatible materials - refer to Section 7 - Handling and Storage.

## Section 11 - TOXICOLOGICAL INFORMATION

cefotaxime sodium

### TOXICITY AND IRRITATION

CEFOTAXIME SODIUM:

- unless otherwise specified data extracted from RTECS - Register of Toxic Effects of Chemical Substances.

| TOXICITY | IRRITATION |
|----------|------------|
|----------|------------|

Oral (rat) LD50: 20000 mg/kg

Intraperitoneal (rat) LD50: 10000 mg/kg

Subcutaneous (rat) LD50: 18400 mg/kg

Intravenous (rat) LD50: 7000 mg/kg

Intramuscular (rat) LD50: 2000 mg/kg

Oral (mouse) LD50: 20000 mg/kg

Intraperitoneal (mouse) LD50: 10000 mg/kg

Subcutaneous (mouse) LD50: 12950 mg/kg

Intravenous (mouse) LD50: 8350 mg/kg

Intravenous (Human) TDLo: 1800 mg/kg

Intravenous (Mouse) LD50: 6845 mg/kg

Intravenous (Rabbit) LD50: 1880 mg/kg

Intravenous (child) TDLo: 1800 mg/kg/18d-I Nil Reported

Foetolethality, agranulocytosis, ataxia, respiratory tract changes recorded.

## Section 12 - ECOLOGICAL INFORMATION

No data

### Ecotoxicity

| Ingredient        | Persistence: Water/Soil | Persistence: Air  | Bioaccumulation | Mobility |
|-------------------|-------------------------|-------------------|-----------------|----------|
| cefotaxime sodium | No Data Available       | No Data Available |                 |          |

## Section 13 - DISPOSAL CONSIDERATIONS

### Disposal Instructions

All waste must be handled in accordance with local, state and federal regulations.

! Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. Shelf life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate.

DO NOT allow wash water from cleaning equipment to enter drains. Collect all wash water for treatment before disposal.

· Recycle wherever possible.

· Consult manufacturer for recycling options or consult Waste Management Authority for disposal if no suitable treatment or disposal facility can be identified.

## Section 14 - TRANSPORTATION INFORMATION

NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS: DOT, IATA, IMDG

## Section 15 - REGULATORY INFORMATION

No data for cefotaxime sodium (CAS: , 64485-93-4)

## Section 16 - OTHER INFORMATION

*Reasonable care has been taken in the preparation of this information, but the author makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The author makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use. For additional technical information please call our toxicology department on +800 CHEMCALL.*

■ Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

A list of reference resources used to assist the committee may be found at:  
[www.chemwatch.net/references](http://www.chemwatch.net/references).

■ The (M)SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

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