

Revision Date 25-Jul-2014 **Revision Number 2** 

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE **COMPANY/UNDERTAKING**

### 1.1. Product identifier

**Product Description:** Cefotaxime

455270000; 455270010; 455270050 Cat No.:

CAS-No 63527-52-6 EC-No. 264-299-1

**Molecular Formula** C16 H17 N5 O7 S2

## 1.2. Relevant identified uses of the substance or mixture and uses advised against

**Recommended Use** Laboratory chemicals. No Information available Uses advised against

### 1.3. Details of the supplier of the safety data sheet

Acros Organics BVBA Company

Janssen Pharmaceuticalaan 3a

2440 Geel, Belgium

E-mail address begel.sdsdesk@thermofisher.com

1.4. Emergency telephone number

For information US call: 001-800-ACROS-01 / Europe call: +32 14 57 52 11 Emergency Number US:001-201-796-7100 / Europe: +32 14 57 52 99 CHEMTREC Tel. No.US:001-800-424-9300 / Europe:001-703-527-3887

## **SECTION 2: HAZARDS IDENTIFICATION**

### 2.1. Classification of the substance or mixture

### CLP Classification - Regulation (EC) No 1272/2008

### Physical hazards

Based on available data, the classification criteria are not met

#### **Health hazards**

Category 2 Skin Corrosion/irritation Serious Eye Damage/Eye Irritation Category 2 Respiratory Sensitization Category 1 Skin Sensitization Category 1 Specific target organ toxicity - (single exposure) Category 3

#### **Environmental hazards**

Based on available data, the classification criteria are not met

## Classification according to EU Directives 67/548/EEC or 1999/45/EC

Symbol(s) Xn - Harmful

R-phrase(s)

R36/37/38 - Irritating to eyes, respiratory system and skin R42/43 - May cause sensitization by inhalation and skin contact

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For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.

#### 2.2. Label elements



Signal Word Danger

### **Hazard Statements**

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

### **Precautionary Statements**

P302 + P352 - IF ON SKIN: Wash with plenty of soap and water

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing

P304 + P340 - IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing

P312 - Call a POISON CENTER or doctor/physician if you feel unwell

P280 - Wear protective gloves/ protective clothing/ eye protection/ face protection

### 2.3. Other hazards

No information available

## **SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**

| Component  | CAS-No     | EC-No.            | Weight % | CLP Classification -<br>Regulation (EC) No<br>1272/2008  | DSD Classification -<br>67/548/EEC |
|------------|------------|-------------------|----------|--|------------------------------------|
| Cefotaxime | 63527-52-6 | EEC No. 264-299-1 | >95      | Skin Irrit. 2 (H315)<br>Eye Irrit. 2 (H319)<br>STOT SE 3 (H335)<br>Skin Sens. 1 (H317)<br>Resp. Sens. 1 (H334) | Xn;R42<br>Xi;R36/37/38-43          |

For the full text of the R-phrases and H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: FIRST AID MEASURES**

## 4.1. Description of first aid measures

**Eye Contact** Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Skin Contact Wash off immediately with soap and plenty of water while removing all contaminated

clothes and shoes.

**Ingestion** Clean mouth with water and drink afterwards plenty of water.

**Inhalation** Move to fresh air.

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**Protection of First-aiders** 

Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination.

### 4.2. Most important symptoms and effects, both acute and delayed

May cause allergy or asthma symptoms or breathing difficulties if inhaled. May cause allergic skin reaction. . Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

#### 4.3. Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

### **SECTION 5: FIREFIGHTING MEASURES**

### 5.1. Extinguishing media

### **Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

### Extinguishing media which must not be used for safety reasons

No information available.

### 5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors.

#### **Hazardous Combustion Products**

Carbon monoxide (CO), Carbon dioxide (CO2), Nitrogen oxides (NOx), Sulfur oxides.

### 5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## **SECTION 6: ACCIDENTAL RELEASE MEASURES**

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation.

#### 6.2. Environmental precautions

See Section 12 for additional ecological information.

## 6.3. Methods and material for containment and cleaning up

#### 6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

### **SECTION 7: HANDLING AND STORAGE**

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes. Do not breathe vapors or spray mist.

### 7.2. Conditions for safe storage, including any incompatibilities

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Keep container tightly closed in a dry and well-ventilated place. To maintain product quality: Keep refrigerated.

### 7.3. Specific end use(s)

Use in laboratories

## **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

#### 8.1. Control parameters

### **Exposure limits**

This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### **Biological limit values**

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies.

### Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS14/3 General methods for sampling and gravimetric analysis of respirable and inhalable dust

No information available **Derived No Effect Level (DNEL)** 

| Route of exposure | Acute effects (local) | Acute effects (systemic) | Chronic effects<br>(local) | Chronic effects (systemic) |
|-------------------|-----------------------|--------------------------|----------------------------|----------------------------|
| Oral              |                       | , ,                      | , ,                        | , ,                        |
| Dermal            |                       |                          |                            |                            |
| Inhalation        |                       |                          |                            |                            |

Predicted No Effect Concentration No information available. (PNEC)

### 8.2. Exposure controls

### **Engineering Measures**

Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

**Eye Protection** Goggles (European standard - EN 166)

**Hand Protection** Protective gloves

**EU** standard Glove comments **Glove material** Breakthrough time Glove thickness

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Natural rubber See manufacturers EN 374 (minimum requirement) Nitrile rubber recommendations Neoprene **PVC** 

Skin and body protection Long sleeved clothing

Inspect gloves before use. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Remove gloves with care avoiding skin contamination.

**Respiratory Protection** When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

To protect the wearer, respiratory protective equipment must be the correct fit and be used

Method - No information available

Solid

Solid

Solid

and maintained properly

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

> are exceeded or if irritation or other symptoms are experienced Recommended Filter type: Particulates filter conforming to EN 143

Small scale/Laboratory use Use a NIOSH/MSHA or European Standard EN 149:2001 approved respirator if exposure

limits are exceeded or if irritation or other symptoms are experienced.

Recommended half mask:- Particle filtering: EN149:2001 When RPE is used a face piece Fit Test should be conducted

Handle in accordance with good industrial hygiene and safety practice. **Hygiene Measures** 

No information available. **Environmental exposure controls** 

### **SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES**

## 9.1. Information on basic physical and chemical properties

Off-white **Appearance Physical State** Solid Powder

No information available Odor **Odor Threshold** No data available No information available pН No data available **Melting Point/Range** No data available **Softening Point** 

**Boiling Point/Range** No information available Flash Point No information available

**Evaporation Rate** Not applicable

No information available Flammability (solid,gas)

No data available **Explosion Limits** 

**Vapor Pressure** No data available **Vapor Density** Not applicable

Specific Gravity / Density No data available **Bulk Density** No data available Water Solubility No information available

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

**Autoignition Temperature** Not applicable **Decomposition temperature** No data available Not applicable **Viscosity** 

No information available

**Explosive Properties Oxidizing Properties** No information available

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9.2. Other information

Molecular Formula C16 H17 N5 O7 S2

Molecular Weight 455.47

## **SECTION 10: STABILITY AND REACTIVITY**

10.1. Reactivity

None known, based on information available

10.2. Chemical stability

Stable under normal conditions

10.3. Possibility of hazardous reactions

Hazardous Polymerization No information available. Hazardous Reactions No information available.

10.4. Conditions to avoid

None known.

10.5. Incompatible materials

Strong oxidizing agents.

10.6. Hazardous decomposition products

Carbon monoxide (CO). Carbon dioxide (CO2). Nitrogen oxides (NOx). Sulfur oxides.

## **SECTION 11: TOXICOLOGICAL INFORMATION**

11.1. Information on toxicological effects

**Product Information**No acute toxicity information is available for this product

(a) acute toxicity;

OralNo data availableDermalNo data availableInhalationNo data available

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

**Respiratory** Category 1 **Skin** Category 1

(e) germ cell mutagenicity; No data available

(f) carcinogenicity; No data available

There are no known carcinogenic chemicals in this product

(g) reproductive toxicity; No data available

(h) STOT-single exposure; Category 3

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(i) STOT-repeated exposure: No data available

No information available. **Target Organs** 

Not applicable (j) aspiration hazard;

Solid

The toxicological properties have not been fully investigated. See actual entry in RTECS for Other Adverse Effects

complete information

delayed

Symptoms / effects, both acute and Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling

of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

## **SECTION 12: ECOLOGICAL INFORMATION**

12.1. Toxicity

**Ecotoxicity effects** Contains no substances known to be hazardous to the environment or that are not

degradable in waste water treatment plants.

12.2. Persistence and degradability No information available

No information available 12.3. Bioaccumulative potential

12.4. Mobility in soil No information available

12.5. Results of PBT and vPvB

assessment

No data available for assessment.

12.6. Other adverse effects

**Endocrine Disruptor Information Persistent Organic Pollutant** 

**Ozone Depletion Potential** 

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

## **SECTION 13: DISPOSAL CONSIDERATIONS**

13.1. Waste treatment methods

Waste from Residues / Unused

**Products** 

Waste is classified as hazardous. Dispose of in accordance with the European Directives

on waste and hazardous waste. Dispose of in accordance with local regulations.

Dispose of this container to hazardous or special waste collection point. **Contaminated Packaging** 

**European Waste Catalogue (EWC)** 

According to the European Waste Catalogue, Waste Codes are not product specific, but

application specific.

Other Information

Waste codes should be assigned by the user based on the application for which the product

was used. Do not empty into drains.

### **SECTION 14: TRANSPORT INFORMATION**

Not regulated IMDG/IMO

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

ADR Not regulated

14.1. UN number

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14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

IATA Not regulated

14.1. UN number

14.2. UN proper shipping name

14.3. Transport hazard class(es)

14.4. Packing group

**14.5. Environmental hazards**No hazards identified

14.6. Special precautions for user No special precautions required

14.7. Transport in bulk according to Not applicable, packaged goods

Annex II of MARPOL73/78 and the

IBC Code

### **SECTION 15: REGULATORY INFORMATION**

#### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

International Inventories X = listed

| Component  | EINECS   | ELINCS | NLP | TSCA | DSL | NDSL | PICCS | ENCS | IECSC | AICS | KECL |
|------------|----------|--------|-----|------|-----|------|-------|------|-------|------|------|
| Cefotaxime | 264-299- | -      |     | -    | Х   | -    | -     | -    | -     | -    | -    |
|            | 1        |        |     |      |     |      |       |      |       |      |      |

### **National Regulations**

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 94/33/EC on the protection of young people at work

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work

### 15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has not been conducted

## **SECTION 16: OTHER INFORMATION**

#### Full text of R-phrases referred to under sections 2 and 3

R36/37/38 - Irritating to eyes, respiratory system and skin

R42/43 - May cause sensitization by inhalation and skin contact

### Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

H335 - May cause respiratory irritation

#### Legend

**CAS** - Chemical Abstracts Service

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

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EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

IECSC - Chinese Inventory of Existing Chemical Substances **KECL** - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

**ACGIH** - American Conference of Governmental Industrial Hygienists

**DNEL** - Derived No Effect Level

**RPE** - Respiratory Protective Equipment

LC50 - Lethal Concentration 50% NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

**OECD** - Organisation for Economic Co-operation and Development

**BCF** - Bioconcentration factor

ICAO/IATA - International Civil Aviation Organization/International Air Transport Association

**ENCS** - Japanese Existing and New Chemical Substances

AICS - Australian Inventory of Chemical Substances

IARC - International Agency for Research on Cancer

NZIoC - New Zealand Inventory of Chemicals

PNEC - Predicted No Effect Concentration

POW - Partition coefficient Octanol:Water

vPvB - very Persistent, very Bioaccumulative

TWA - Time Weighted Average

EC50 - Effective Concentration 50%

LD50 - Lethal Dose 50%

MARPOL - International Convention for the Prevention of Pollution from

Ships

ATE - Acute Toxicity Estimate VOC - Volatile Organic Compounds

## Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI. Merck index, **RTECS** 

#### **Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Use of personal protective equipment, covering appropriate selection, compatibility, breakthrough thresholds, care, maintenance, fit and standards.

First aid for chemical exposure, including the use of eye wash and safety showers.

**Revision Date** 25-Jul-2014 **Revision Summary** Not applicable.

## This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

#### **Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

# **End of Safety Data Sheet**