

SAFETY DATA SHEET

Creation Date 19-Aug-2016

Revision Date 20-Dec-2025

Revision Number 7

This safety data sheet was created pursuant to the requirements of: US OSHA Hazard Communication Standard 2024 (29 CFR 1910.1200)

1. Identification

Product Name Ceftazidime pentahydrate

Cat No. : AC461730000; AC461730050; AC461730250

CAS No 78439-06-2
Synonyms No information available

Recommended Use Laboratory chemicals.
Uses advised against Food, drug, pesticide or biocidal product use.

Details of the supplier of the safety data sheet

Company

Fisher Scientific Company
One Reagent Lane
Fair Lawn, NJ 07410
Tel: (201) 796-7100

Acros Organics
One Reagent Lane
Fair Lawn, NJ 07410

Emergency Telephone Number

For information **US** call: 001-800-227-6701 / **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

2. Hazard(s) identification

Classification

This chemical is considered hazardous according to [US] OSHA (29 CFR 1910.1200, 2024)

| | |
|-----------------------------------|------------|
| Serious Eye Damage/Eye Irritation | Category 2 |
| Respiratory Sensitization | Category 1 |
| Skin Sensitization | Category 1 |

Label Elements

Signal Word

Danger

Hazard Statements

May cause an allergic skin reaction
Causes serious eye irritation

May cause allergy or asthma symptoms or breathing difficulties if inhaled



Precautionary Statements

Prevention

Wash face, hands and any exposed skin thoroughly after handling
Avoid breathing dust/fume/gas/mist/vapors/spray
In case of inadequate ventilation wear respiratory protection
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection

Inhalation

If experiencing respiratory symptoms: Call a POISON CENTER or doctor
IF INHALED: Remove person to fresh air and keep comfortable for breathing

Skin

IF ON SKIN: Wash with plenty of soap and water
If skin irritation or rash occurs: Get medical advice/attention
Take off contaminated clothing and wash before reuse

Eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
If eye irritation persists: Get medical advice/attention

Disposal

Dispose of contents/container to an approved waste disposal plant

Hazards not otherwise classified (HNOC)

None identified

Hazards classified under paragraph (d)(1)(ii) of 1910.1200

No information available

3. Composition/information on Ingredients

| Component | CAS No | Weight % |
|--------------------------|------------|----------|
| Ceftazidime pentahydrate | 78439-06-2 | >95 |
| Ceftazidime | 72558-82-8 | - |

4. First-aid measures

General Advice

If symptoms persist, call a physician.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Skin Contact

Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician.

Inhalation

Remove to fresh air. If not breathing, give artificial respiration. Get medical attention if symptoms occur.

Ingestion

Clean mouth with water and drink afterwards plenty of water. Get medical attention if symptoms occur.

| | |
|--|---|
| Most important symptoms and effects | . 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 |
| Notes to Physician | Treat symptomatically |

5. Fire-fighting measures

| | |
|---|---|
| Suitable Extinguishing Media | Water spray, carbon dioxide (CO ₂), dry chemical, alcohol-resistant foam. |
| Unsuitable Extinguishing Media | No information available |
| Flash Point | No information available |
| Method - | No information available |
| Autoignition Temperature | No information available |
| Explosion Limits | |
| Upper | No data available |
| Lower | No data available |
| Sensitivity to Mechanical Impact | No information available |
| Sensitivity to Static Discharge | No information available |

Specific Hazards Arising from the Chemical

Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

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

Protective Equipment and Precautions for Firefighters

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

NFPA

Health
2

Flammability
1

Instability
0

Physical hazards
N/A

6. Accidental release measures

| | |
|---|--|
| Personal Precautions | Ensure adequate ventilation. Use personal protective equipment as required. Avoid dust formation. |
| Environmental Precautions | Should not be released into the environment. |
| Methods for Containment and Clean Up | Sweep up and shovel into suitable containers for disposal. Keep in suitable, closed containers for disposal. |

7. Handling and Storage

| | |
|-----------------|--|
| Handling | Wear personal protective equipment/face protection. Ensure adequate ventilation. Do not get in eyes, on skin, or on clothing. Avoid ingestion and inhalation. Avoid dust formation. |
| Storage. | Keep container tightly closed in a dry and well-ventilated place. To maintain product quality: Keep refrigerated. Incompatible Materials. Strong oxidizing agents. Strong acids. Peroxides. Nitric acid. |

8. Exposure controls / personal protection

| | |
|----------------------------|--|
| Exposure Guidelines | This product does not contain any hazardous materials with occupational exposure limitsestablished by the region specific regulatory bodies. |
|----------------------------|--|

| | |
|-----------------------------|--|
| Engineering Measures | Ensure that eyewash stations and safety showers are close to the workstation location. |
|-----------------------------|--|

Personal Protective Equipment

| | |
|---------------------------------|---|
| Eye/face Protection | Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166. |
| Skin and body protection | Wear appropriate protective gloves and clothing to prevent skin exposure. |
| Respiratory Protection | Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. |
| Recommended Filter type: | Particulates filter conforming to EN 143. |
| Hygiene Measures | Handle in accordance with good industrial hygiene and safety practice. |

9. Physical and chemical properties**Appearance****Physical State****Color****Odor****Odor Threshold****Property****Melting Point/Range****Softening Point****Boiling Point/Range****Flash Point****Flammability (liquid)****Flammability (solid,gas)****Explosion Limits****Autoignition Temperature****Decomposition Temperature****pH****Viscosity****Water Solubility****Solubility in other solvents****Partition Coefficient (n-octanol/water)****Vapor Pressure****Density / Specific Gravity****Bulk Density****Vapor Density****Particle characteristics****Other Information****Molecular Formula****Molecular Weight****Evaporation Rate**

Solid

White to off-white

No information available

No information available

Values

> 150 °C / > 302 °F

No data available

No information available

No information available

Not applicable

No information available

No data available

No data available

No data available

No information available

Not applicable

Slightly soluble

No information available

No data available

No data available

No data available

Not applicable

No data available

Remarks**• Method**

(with decomposition)

Method - No information available
Solid

Solid

Solid

10. Stability and reactivity

| | |
|------------------------|--|
| Reactive Hazard | None known, based on information available |
| Stability | Stable under recommended storage conditions. |

| | |
|---|--|
| Conditions to Avoid | Incompatible products. |
| Incompatible Materials | Strong oxidizing agents, Strong acids, Peroxides, Nitric acid |
| Hazardous Decomposition Products | Carbon monoxide (CO), Carbon dioxide (CO ₂), Nitrogen oxides (NO _x), Sulfur oxides |
| Hazardous Polymerization | No information available. |
| Hazardous Reactions | None under normal processing. |

11. Toxicological information

Information on expected route of exposure

| | |
|-------------------|--|
| Inhalation | Not an expected route of exposure. |
| Ingestion | May be harmful if swallowed. |
| Eyes | Irritating to eyes. Avoid contact with eyes. |
| Skin | May cause irritation. Avoid contact with skin. |

Toxicology data for the components

| Component | LD50 Oral | LD50 Dermal | LC50 Inhalation |
|-------------|------------------------|-------------|-----------------|
| Ceftazidime | LD50 > 20 g/kg (Rat) | - | - |

| | |
|---|--------------------------|
| Toxicologically Synergistic Products | No information available |
|---|--------------------------|

| | |
|---------------------------------------|-------------------|
| (b) skin corrosion/irritation; | No data available |
|---------------------------------------|-------------------|

| | |
|---|-------------------|
| (c) serious eye damage/irritation; | No data available |
|---|-------------------|

(d) respiratory or skin sensitization;

| | |
|--------------------|---|
| Respiratory | No data available |
| Skin | No data available |
| | May cause sensitization by skin contact |

| | |
|------------------------------------|-------------------|
| (e) germ cell mutagenicity; | No data available |
|------------------------------------|-------------------|

(f) carcinogenicity;

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | CAS No | IARC | NTP | ACGIH | OSHA | Mexico |
|--------------------------|------------|------------|------------|------------|------------|------------|
| Ceftazidime pentahydrate | 78439-06-2 | Not listed | Not listed | Not listed | Not listed | Not listed |
| Ceftazidime | 72558-82-8 | Not listed | Not listed | Not listed | Not listed | Not listed |

| | |
|-----------------------------------|-------------------|
| (g) reproductive toxicity; | No data available |
|-----------------------------------|-------------------|

| | |
|----------------------------------|-------------------|
| (h) STOT-single exposure; | No data available |
|----------------------------------|-------------------|

| | |
|------------------------------------|-------------------|
| (i) STOT-repeated exposure; | No data available |
|------------------------------------|-------------------|

| | |
|----------------------|---------------------------|
| Target Organs | No information available. |
|----------------------|---------------------------|

(j) aspiration hazard; Not applicable
Solid

Other Adverse Effects The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed 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.

Other Adverse Effects The toxicological properties have not been fully investigated.

Endocrine Disrupting Properties This product does not contain any known or suspected endocrine disruptors.

12. Ecological information

Ecotoxicity

Do not empty into drains.

Persistence and Degradability No information available

Bioaccumulation/ Accumulation No information available.

Mobility No information available.

13. Disposal considerations

Waste Disposal Methods Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

14. Transport information

DOT Not regulated

TDG Not regulated

IATA Not regulated

IMDG/IMO Not regulated

15. Regulatory Information

United States of America Inventory

| Component | CAS No | TSCA | TSCA Inventory notification - Active-Inactive | TSCA - EPA Regulatory Flags |
|--------------------------|------------|------|---|-----------------------------|
| Ceftazidime pentahydrate | 78439-06-2 | - | - | - |
| Ceftazidime | 72558-82-8 | - | - | - |

Legend:

TSCA US EPA (TSCA) - Toxic Substances Control Act, (40 CFR Part 710)

X - Listed

'-' - Not Listed

TSCA - Per 40 CFR 751, Regulation of Certain Chemical Substances & Mixtures, Under TSCA Section 6(h) (PBT) Not applicable

TSCA 12(b) - Notices of Export Not applicable

International Inventories

Canada (DSL/NDL), Europe (EINECS/ELINCS/NLP), Philippines (PICCS), Japan (ENCS), Japan (ISHL), Australia (AICS), China (IECSC), Korea (KECL).

| Component | CAS No | DSL | NDSL | EINECS | PICCS | ENCS | ISHL | AICS | IECSC | KECL |
|--------------------------|------------|-----|------|-----------|-------|------|------|------|-------|------|
| Ceftazidime pentahydrate | 78439-06-2 | - | - | - | - | - | X | - | - | - |
| Ceftazidime | 72558-82-8 | X | - | 276-715-9 | - | - | | - | X | - |

KECL - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act) Not applicable

Clean Air Act Not applicable

OSHA - Occupational Safety and Health Administration Not applicable

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

California Proposition 65 This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations Not applicable

U.S. Department of Transportation

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

U.S. Department of Homeland Security This product does not contain any DHS chemicals.

Other International Regulations

Mexico - Grade No information available

Authorisation/Restrictions according to EU REACH

| Component | CAS No | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|--------------------------|------------|---|---|---|
| Ceftazidime pentahydrate | 78439-06-2 | - | - | - |
| Ceftazidime | 72558-82-8 | - | Use restricted. See entry 75. (see link for restriction) | - |

| | | | | |
|--|--|--|----------|--|
| | | | details) | |
|--|--|--|----------|--|

REACH links

<https://echa.europa.eu/substances-restricted-under-reach>

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

| Component | CAS No | OECD HPV | Persistent Organic Pollutant | Ozone Depletion Potential | Restriction of Hazardous Substances (RoHS) |
|--------------------------|------------|----------------|------------------------------|---------------------------|--|
| Ceftazidime pentahydrate | 78439-06-2 | Not applicable | Not applicable | Not applicable | Not applicable |
| Ceftazidime | 72558-82-8 | Not applicable | Not applicable | Not applicable | Not applicable |

Contains component(s) that meet a 'definition' of per & poly fluoroalkyl substance (PFAS)?

Not applicable

Other International Regulations

| Component | CAS No | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements | Rotterdam Convention (PIC) | Basel Convention (Hazardous Waste) |
|--------------------------|------------|---|--|----------------------------|------------------------------------|
| Ceftazidime pentahydrate | 78439-06-2 | Not applicable | Not applicable | Not applicable | Not applicable |
| Ceftazidime | 72558-82-8 | Not applicable | Not applicable | Not applicable | Not applicable |

16. Other Information

Prepared By

Product stewardship (Regulatory Affairs)
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Creation Date

19-Aug-2016

Revision Date

20-Dec-2025

Print Date

20-Dec-2025

Revision Summary

Updated to the U.S. Department of Labor's Occupational Safety and Health Administration (OSHA) which published its Final Rule in the Federal Register revising the Hazard Communication Standard (HCS/HazCom), 29 CFR 1910.1200 (2024) (HCS §1910.1200, 2024), May 20, 2024, effective July 19, 2024.

Disclaimer

The information provided in 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text

End of SDS