

Revision number: 2 Revision date: 10/06/2014

1. **IDENTIFICATION**

Product name: Product code:

Piperacillin Sodium Salt P1774

Product use: Restrictions on use:

> Company: TCI America 9211 N. Harborgate Street Portland, OR 97203 U.S.A. Telephone: +1-800-423-8616 / +1-503-283-1681 Fax: +1-888-520-1075 / +1-503-283-1987 e-mail: sales-US@TCIchemicals.com www.TCIchemicals.com

2. HAZARD(S) IDENTIFICATION

OSHA Haz Com: CFR 1910.1200:	Not classifiable	
Signal word:	None	
Hazard Statement(s):	None	
Pictogram(s) or Symbol(s):	None	
Precautionary Statement(s):	None	

Supplementary Information:

While this material is not classified as hazardous under OSHA, this SDS contains valuable information critical to safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Substance Components: Piperacillin Sodium	
Percent:	>98.0%(N)
CAS Number:	59703-84-3
Molecular Weight:	539.54
Chemical Formula:	$C_{23}H_{26}N_5NaO_7S$

4. FIRST-AID MEASURES

Inhalation:	Move victim to fresh air. Call emergency medical service. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. Keep victim warm and quiet. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.
Skin contact:	Remove and isolate contaminated clothing and shoes. In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

For laboratory research purposes. Not for drug or household use.

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SAFETY DATA SHEET

Emergency telephone number: Chemical Emergencies: TCI America (8:00am - 5:00pm) PST +1-503-286-7624 Transportation Emergencies: Chemtrec 24-Hour +1-800-424-9300 (U.S.A.) +1-703-527-3887 (International) **Responsible department: TCI** America Environmental Health Safety and Security +1-503-286-7624

4. FIRST-AID MEASURES					
Eye contact:	Move victim to fresh air. Check for and remove any contact lenses. In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. Keep victim warm and quiet. Treat symptomatically and supportively. Effects of exposure to substance may be delayed. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. If a person vomits place them in the recovery position so that vomit will not reenter the mouth and throat. Rinse mouth. Keep victim warm and quiet. Loosen tight clothing such as a collar, tie, belt or waistband. If swallowed, seek medical advice immediately and show the container or label. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Effects of exposure (ingestion) to substance may be delayed.				
Symptoms/effects:					
Acute: Delayed:	No data available No data available				
Immediate medical attention:	If breathing has stopped, perform artificial respiration. Use first aid treatment according to the nature of the injury. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.				
5. FIRE-FIGHTING MEASURES					
Suitable extinguishing media:	Dry chemical, CO_2 , water spray, or alcohol-resistant foam. Consult with local fire authorities before attempting large scale fire fighting operations.				
Specific hazards arising from the chen	nical				
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Nitrogen oxides Silicates Metallic oxides Closed containers may explode from heat of a fire.				
Special precautions for fire-fighters: Not available Special protective equipment for fire-fi Structural fire fighters' protective clothing 6. ACCIDENTAL RELEASE MEASU	provides limited protection in fire situations ONLY; it may not be effective in spill situations.				
Personal precautions:	Do not touch damaged containers or spilled material unless wearing appropriate protective clothing				
Personal protective equipment: Emergency procedures:	(Section 8). Wear protective clothing, gloves and eye protection. In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise caution.				
Methods and materials for containmen Dike far ahead of liquid spill for later dispo Environmental precautions: Prevent entry into sewers, basements or o	osal.				
7. HANDLING AND STORAGE					
Precautions for safe handling:	Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.				
Conditions for safe storage:	Keep container tightly closed in a dry and well-ventilated place. Store under inert gas (e.g. Argon). Hygroscopic material, store in a tightly sealed container.				
Storage incompatibilities:	Store away from oxidizing agents				
8. EXPOSURE CONTROLS / PERS	ONAL PROTECTION				
Exposure limits:	No data available				
	ent to control airborne levels. Eyewash fountains should be provided in areas where there is any possibility that ce. Follow safe industrial engineering/laboratory practices when handling any chemical.				
Personal protective equipment					
Respiratory protection: Hand protection: Eye protection:	Dust respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves. Safety glasses.				

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION Skin and body protection: Lab coat.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Solid Crystal - Powder White No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	185°C (dec.) (365°F) No data available No data available No data available No data available No data available	pH: Vapor pressure: Vapor density: Dynamic Viscosity:	No data available No data available No data available No data available
Partition coefficient: n-octanol/water (log Pow)	No data available	Evaporation rate: (Butyl Acetate = 1)	No data available
Flash point: Flammability (solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limits: Lower: No data avai Upper: No data avai	

Solubility(ies):

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products:

11. TOXICOLOGICAL INFORMATION

Stable under recommended storage conditions. (See Section 7) No hazardous reactivity has been reported. Avoid excessive heat and light. Acids, Moisture, Oxidizing agents No data available

Not Available.

RTECS Number: XI0180000				
Acute Toxicity: orl-rat LD50:>10000 mg/kg		ipr-rat LD50:7600 mg/kg		
scu-rat LD50:8800 mg/kg				
Skin corrosion/irritation: No data available				
Serious eye damage/irritation: No data available				
Respiratory or skin sensitization: No data available				
Germ cell mutagenicity: No data available				
Carcinogenicity:				
No data available				
IARC: No data available	NTP:	No data available	OSHA:	No data available
Reproductive toxicity:				

Piperacillin Sodium Salt

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Inhalation, Eye contact, Ingestion.

Routes of Exposure: Symptoms related to exposure:

No specific information is available in our data base regarding the toxic effects of this material for humans. However, exposure to any chemical should be kept to a minimum. Always follow safe industrial hygiene practices and wear proper protective equipment when handling this compound. **Potential Health Effects:**

No specific information available; skin and eye contact may result in irritation. May be harmful if inhaled or ingested. **Target organ(s):** No data available

12. ECOLOGICAL INFORMATION

Ecotoxicity Fish: Crustacea: Algae:	No data available No data available No data available
Persistence and degradability: Bioaccumulative potential (BCF): Mobillity in soil: Partition coefficient:	No data available No data available No data available No data available
n-octanol/water (log P _{ow}) Soil adsorption (Koc): Henry's Law: constant (PaM ³ /mol)	No data available No data available

13. DISPOSAL CONSIDERATIONS				
Disposal of product:	Recycle to process if possible. It is the generator's responsibility to comply with Federal, State and Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is intended to provide assistance but does not replace these laws, nor does compliance in accordance with this section ensure regulatory compliance according to the law. US EPA guidelines for Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261.			
Disposal of container:	Dispose of as unused product.			
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.			
14. TRANSPORT INFORMATION				
DOT (US)	Non-hazardous for transportation.			
ΙΑΤΑ	Non-hazardous for transportation.			

IMDG Non-hazardous for transportation.

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is NOT on the EPA Toxic Substances Control Act (TSCA) inventory. The following notices are required by 40 CFR 720.36 (C) for those products not on the inventory list:

(i) These products are supplied solely for use in research and development by or under the supervision of a technically qualified individual as defined in 40 CFR 720.0 et sec.

(ii) The health risks of these products have not been fully determined. Any information that is or becomes available will be supplied on a SDS sheet.

US Federal Regulations

CERCLA Hazardous substance and Reportable Quantity:				
SARA 313:	Not Listed			
SARA 302:	Not Listed			

State Regulations

State Right-to-Know	
Massachusetts	Not Listed
New Jersey	Not Listed
Pennsylvania	Not Listed
California Proposition 65:	Not Listed

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Other Information	TION				
NFPA Rating:		HMIS Classification:			
Health: 0		Health:	0		
Flammability: 0		Flammability:	0		
Instability: 0		Physical:	0		
International Inventories					
WHMIS hazard class: EC-No:	No data available. 261-868-6				
16. OTHER INFORMATION					

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TCI chemicals are for research purposes only and are NOT intended for use as drugs, food additives, households, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its affiliates or subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our SDS are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated SDS for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, face mask, fume hood). For proper handling and disposal, always comply with federal, state and local regulations.