

Revision number: 1 Revision date: 07/06/2018

#### 1. IDENTIFICATION

Product name: Product code:

#### 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: WHMIS 2015:

Acute Toxicity - Oral [Category 3] Skin Corrosion/Irritation [Category 2] Eye Damage/Irritation [Category 2A] Aquatic Hazard (Acute) [Category 3] Aquatic Hazard (Long-Term) [Category 3]

4-Bromobenzonitrile

For laboratory research purposes.

Not for drug or household use.

B1426

Danger!

Signal word:

Hazard Statement(s):

Toxic if swallowed Causes skin irritation Causes serious eye irritation Harmful to aquatic life Harmful to aquatic life with long lasting effects

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal]

Hazards not otherwise classified: [HNOC] Avoid release to the environment. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, eye protection.

If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. Take off contaminated clothing and wash it before reuse. 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 or attention.

Store locked up.

Dispose of contents and container in accordance with local, regional, national regulations (e.g. US: 40 CFR Part 261, EU:91/156/EEC, JP: Waste Disposal and Cleaning Act, etc.).

None.

TCI AMERICA 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

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Components: Percent: CAS RN: Molecular Weight:	Substance 4-Bromobenzonitrile >97.0%(GC) 623-00-7 182.02
Chemical Formula:	C7H4BrN
Synonyms:	4-Bromocyanobenzene

# 4. FIRST-AID MEASURES

Description of first aid measures	
Inhalation:	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.
Eye contact:	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.
Ingestion:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth.
Symptoms/effects:	
Acute:	Redness.
Delayed:	No data available
Indication of any immediate medical Not available.	attention:
Notes to physician: No data available	

## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Specific hazards arising from the chemical:	Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume.
Hazardous combustion products: Other specific hazards:	These products include: Carbon oxides Nitrogen oxides Halogenated compounds Closed containers may explode from heat of a fire.
Advice for firefighters:	Wear self-contained breathing apparatus if possible.

# 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc. Prevent product from entering drains. Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations.
7. HANDLING AND STORAGE	
Precautions for safe handling:	Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent
	dispersion of dust. Wash hands and face thoroughly after handling.
	Use a closed system if possible. Use a local exhaust if dust or aerosol will be generated.
	Avoid contact with skin, eyes and clothing.
Conditions for safe storage, including a	ny incompatibilities
Storage conditions:	Keep container tightly closed. Store in a cool and dark place.
	Store locked up.
	Store away from incompatible materials such as oxidizing agents.
Packaging material:	Comply with laws.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Appropriate engineering controls:	Follow safe industrial engineering/laboratory practices when handling any chemical. Install a closed system or local exhaust. Also install safety shower and eye bath.
Personal protective equipment	
Respiratory protection:	Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use respirators approved under appropriate government standards and follow local and national regulations.
Hand protection:	Impervious gloves.
Eye protection:	Safety goggles. A face-shield, if the situation requires.
Skin and body protection:	Impervious protective clothing. Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold:	Solid Crystal - Powder White - Slightly pale yellow No data available No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic viscosity: Log Pow:	113°C (235°F) 236°C (457°F) No data available No data available No data available No data available	pH: Vapour pressure: Vapour density: Dynamic Viscosity: Evaporation rate(Butyl Acetate=1):	No data available No data available. No data available No data available No data available
Flash point: Flammability(solid, gas):	No data available No data available	Autoignition temperature: Flammability or explosive limits: Lower: Upper:	No data available No data available No data available
Solubility(ies): [Water] [Other solvents] Soluble:	Insoluble Methanol		

10. STABILITY AND REACTIVITY

Reactivity:No data availableChemical stability:Stable under proper conditions.Possibility of hazardous reactions:No special reactivity has been reported.Incompatible materials:Oxidizing agents, Strong basesHazardous decomposition products:Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Hydrogen bromide

## 11. TOXICOLOGICAL INFORMATION

## RTECS Number: DI2460000

Acute Toxicity: ipr-mus LD50:1000 mg/kg		orl-mus LD50:237 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
<b>Reproductive toxicity:</b> No data available				
Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
Ecotoxicity:				
Fish:	No data available			
Crustacea:	No data available			
Algae:	No data available			
Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil	No data available No data available			
Log Pow:	No data available			
Soil adsorption (Koc):	No data available			
Henry's Law (PaM ³/mol):	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. The product should not be allowed to enter the environment, drains, water ways, or the soil.			
Disposal of container: Other considerations:		sed product. Do not re-use empty cc Il, state and local regulations when d		he substance.

14. TRANSPORT INFORMATION

DOT (US) UN number: UN3439	<b>Proper Shipping Name:</b> Nitriles, solid , toxic, n.o.s	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: III	
IATA UN number: UN3439	<b>Proper Shipping Name:</b> Nitriles, solid, toxic, n.o.s	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: III	
IMDG UN UN3439 numb er:	<b>Proper Shipping Name:</b> Nitriles, solid, toxic, n.o.s	<b>Class or Division:</b> 6.1 Toxic material.	Packing Group: III	
EmS number:	F-A, S-A			

# 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 Hazardo	ous substance	e and Reportable Quantity:		
SARA 313:		Not Listed		
SARA 302:		Not Listed		
State Regulations	<u>s</u>			
State Right-to-Kn	iow			
Massachuse	tts	Not Listed		
New Jersey		Not Listed		
Pennsylvania	a	Not Listed		
California Propos	sition 65:	Not Listed		
Other Information	n			
NFPA Rating:	_		HMIS Classification:	
Health:	2		Health:	2
Flammability:	1		Flammability:	1
Instability:	0		Physical:	0
International Inve	entories			
EC-No:		210-764-9		
16. OTHER INF	ORMATION			

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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.