

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: Skin Corrosion/Irritation [Category 2] WHMIS 2015: Eye Damage/Irritation [Category 2A] Flammable Liquids [Category 4] Signal word: Warning! Hazard Statement(s): Combustible liquid Causes skin irritation Causes serious eye irritation Pictogram(s) or Symbol(s): Precautionary Statement(s): [Prevention] Keep away from flames and hot surfaces. - No smoking. Wash hands and face thoroughly after handling. Wear protective gloves, eye protection. If on skin: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice or attention. [Response] 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. [Storage] Store in a well-ventilated place. Keep cool. [Disposal] 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.).

TCI AMERICA

SAFETY DATA SHEET

2-Bromo-4-fluorotoluene

For laboratory research purposes.

Not for drug or household use.

B1872

Hazards not otherwise classified: [HNOC]

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Components: Percent: CAS RN: Molecular Weight: Chemical Formula: Substance 2-Bromo-4-fluorotoluene >98.0%(GC) 1422-53-3 189.03 C7H6BrF

None.

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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			
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. I skin irritation or rash occurs: Get medical advice/attention.		
Eye contact: Ingestion:	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. Get medical advice/attention if you feel unwell. Rinse mouth.		
ingestion.			
Symptoms/effects: Acute:	Redness.		
Delayed:	No data available		
Indication of any immediate medical atte Not available. Notes to physician: No data available	ention:		
5. FIRE-FIGHTING MEASURES			
Suitable extinguishing media: Unsuitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide. Solid streams of water		
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 Halogenated compounds WARNING: Highly toxic HF gas is produced during combustion.		
Advice for firefighters:	Wear self-contained breathing apparatus if possible.		
6. ACCIDENTAL RELEASE MEASU	RES		
Deveenel avecentiene anotesting	Use personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate		
Personal precautions, protective equipment and emergency procedures:	ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, etc.		
Personal precautions, protective equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up:	etc. Prevent product from entering drains. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly		
equipment and emergency procedures: Environmental precautions: Methods and materials for containment	etc. Prevent product from entering drains. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large		
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equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: Prevention of secondary hazards:	etc. Prevent product from entering drains. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use		
equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: Prevention of secondary hazards: 7. HANDLING AND STORAGE Precautions for safe handling: Conditions for safe storage, including a	etc. Prevent product from entering drains. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment. Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing. <b>ny incompatibilities</b>		
equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: Prevention of secondary hazards: 7. HANDLING AND STORAGE Precautions for safe handling:	etc. Prevent product from entering drains. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment. Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing.		
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equipment and emergency procedures: Environmental precautions: Methods and materials for containment and cleaning up: Prevention of secondary hazards: 7. HANDLING AND STORAGE Precautions for safe handling: Conditions for safe storage, including a Storage conditions: Packaging material:	etc. Prevent product from entering drains. Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large amount of spillage, contain a spill by bunding. Adhered or collected material should be promptly disposed of, in accordance with appropriate laws and regulations. Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment. Handling is performed in a well ventilated place. Wear suitable protective equipment. Prevent generation of vapour or mist. Keep away from flames and hot surfaces. Take measures to prevent the build up of electrostatic charge. Use explosion-proof equipment. Wash hands and face thoroughly after handling. Use a closed system if possible. Use a ventilation, local exhaust if vapour or aerosol will be generated. Avoid contact with skin, eyes and clothing. <b>ny incompatibilities</b> Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store away from incompatible materials such as oxidizing agents. Comply with laws.		

Personal protective equipment		
Respiratory protection:	Vapor respirator. Follow local and national regulations.	
Hand protection:	Protective gloves.	
Eye protection:	Safety glasses. A face-shield, if the situation requires.	
Skin and body protection:	Protective clothing. Protective boots, if the situation requires.	

# 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Colour: Odour: Odor threshold: Odour threshold:	Liquid Clear Colorless - Almost colorless No data available No data available No data available	5	
Melting point/freezing point:	No data available	pH:	No data available
Boiling point/range:	175°C (347°F)	Vapour pressure:	No data available.
Decomposition temperature:	No data available	Vapour density:	No data available
Relative density:	1.52	Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available		
Log Pow:	No data available	Evaporation rate(Butyl Acetate=1):	No data available
Flash point: Flammability(solid, gas):	64°C(147°F) No data available	Autoignition temperature: Flammability or explosive limits:	No data available
		Lower:	No data available
		Upper:	No data available
Solubility(ies):			
[Water]	No data available		
[Other solvents]	No data available		

Reactivity: Chemical stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: No data available Stable under proper conditions. No special reactivity has been reported. Open flame Oxidizing agents Carbon dioxide, Carbon monoxide, Hydrogen fluoride, Hydrogen bromide

# 11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	
No data available	

#### 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

Reproductive toxicity: No data available

Target organ(s):

No data available

NTP:

No data available

OSHA:

No data available

# 12. ECOLOGICAL INFORMATION

Ecotoxicity:	
Fish:	No data available
Crustacea:	No data available
Algae:	No data available
Persistence / degradability:	No data available
Bioaccumulative potential(BCF): Mobility in soil	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 CONSIDERATION	
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:	Dispose of as unused product. Do not re-use empty containers.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.
14. TRANSPORT INFORMATION	
DOT (US)	Non-hazardous for transportation.

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IATA	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.

2 2 0

#### **US Federal Regulations**

		and Demonstrately Committee	
	ous substance	and Reportable Quantity:	
SARA 313:		Not Listed	
SARA 302:		Not Listed	
State Regulation	s		
State Right-to-Kr	now		
Massachuse	tts	Not Listed	
New Jersey		Not Listed	
Pennsylvania	а	Not Listed	
California Propos	sition 65:	Not Listed	
Other Information	n		
NFPA Rating:			HMIS Classification:
Health:	2		Health:
Flammability:	2		Flammability:
Instability:	0		Physical:
International Inve	entories_		
EC-No:		215-830-0	

## 16. OTHER INFORMATION

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

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.