

Revision number: 3 Revision date: 05/17/2016

1. IDENTIFICATION

Product name: Product code: Ethyl 7-Bromoheptanoate B1880

For laboratory research purposes.

Product use: Restrictions on use:

Company:

CI 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:

Acute Toxicity - Oral [Category 4] Acute Toxicity - Dermal [Category 4] Acute Toxicity - Inhalation [Category 4]

Signal word:

Hazard Statement(s):

Harmful if swallowed Harmful in contact with skin Harmful if inhaled

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves and protective clothing. Avoid breathing fume, mist, vapors or spray. Use only outdoors or in a well-ventilated area. If swallowed: Immediately call a poison center or doctor. Rinse mouth. If on skin: Wash with plenty of water. Call a poison center or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. None

Dispose of contents and container in accordance with US EPA guidelines for the classification and determination of hazardous waste listed in 40 CFR 261.3. (See Section 13)

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/Mixture: Components: Percent: Substance Ethyl 7-Bromoheptanoate >97.0%(GC)

Not for drug or household use.

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)

+1-703-527-3887 (International) **Responsible department:** TCI America Environmental Health Safety and Security +1- 503-286-7624

Warning! Harmful if swallowed **TCI AMERICA**

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3. COMPOSITION/INFORMATION ON INGREDIENTS CAS Number: 29823-18-5 Molecular Weight: 237.14 **Chemical Formula:** C9H17BrO2 Synonyms: 7-Bromoheptanoic Acid Ethyl Ester 4. FIRST-AID MEASURES Inhalation: Call a poison center or doctor if you feel unwell. Move victim to fresh air. 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. Call a poison center or doctor if you feel unwell. Remove and isolate contaminated clothing and shoes. In Skin contact: 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. If this chemical contacts the eyes, immediately wash (irrigate) the eyes with large amounts of water, Eye contact: occasionally lifting the lower and upper eyelids. If eye irritation persists get medical advice/attention. Move victim to fresh air. Check for and remove any contact lenses. 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. Ingestion: Harmful if swallowed. Call a physician or Poison Control Center immediately. Do not use mouth-to-mouth method if victim ingested the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Loosen tight clothing such as a collar, tie, belt or waistband. 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. Treat symptomatically and supportively. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves. Symptoms/effects: No data available Acute: No data available Delaved: Immediate medical attention: WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is harmful. 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, CO₂, sand, earth, water spray or regular foam Consult with local fire authorities before attempting large scale fire fighting operations. Specific hazards arising from the chemical Hazardous combustion products: These products include: Carbon oxides Halogenated compounds Other specific hazards: Closed containers may explode from heat of a fire. Special precautions for fire-fighters: Use water spray or fog; do not use straight streams. Dike fire-control water for later disposal; do not scatter the material. Containers may explode when heated. Move containers from fire area if you can do it without risk. Special protective equipment for fire-fighters: Wear positive pressure self-contained breathing apparatus (SCBA). Structural fire fighters' protective clothing provides limited protection in fire situations ONLY; it may not be effective in spill situations. Wear chemical protective clothing which is specifically recommended by the manufacturer. It may provide little or no thermal protection. 6. ACCIDENTAL RELEASE MEASURES Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Do not touch Personal precautions: damaged containers or spilled material unless wearing appropriate protective clothing (Section 8). Warn unnecessary personnel to move away. Stop leak if you can do it without risk. Ensure adequate ventilation. Isolate the hazard area and deny entry to unnecessary and unprotected personnel. Personal protective equipment: Safety glasses. Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or

equivalent. Wear protective gloves (nitrile).

needed.

In case of a spill and/or a leak, always shut off any sources of ignition, ventilate the area, and excercise

caution. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Warn personnel to move away. Prevent entry into sewers, basements or confined areas; dike if

Emergency procedures:

6. ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). Stop leak if without risk. Ventilate the area. Absorb with an inert material and put the spilled material in an appropriate waste disposal container. Use clean non-sparking tools to collect absorbed material. **Environmental precautions:**

Keep away from living quarters. Prevent further leakage or spillage if safe to do so. Water runoff can cause environmental damage. Prevent entry into sewers, basements or confined areas; dike if needed.

Precautions for safe handling:	Do NOT breath gas, fumes, vapor, or spray. Do not ingest. Avoid contact with skin and eyes. Avoid contact
5	with skin. Good general ventilation should be sufficient to control airborne levels. Keep container dry.
	Handle and open container with care. Wear suitable protective clothing, gloves and eye/face protection.
	When using do not eat, drink, or smoke. Keep away from sources of ignition.
Conditions for safe storage:	Keep only in the original container in a cool well-ventilated place. Keep away from incompatibles.
	Containers which are opened must be carefully resealed and kept upright to prevent leakage. Avoid
	prolonged storage periods.
Storage incompatibilities:	Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

Appropriate engineering controls:

Good general ventilation should be sufficient to control airborne levels. Ventilation is normally required when handling or using this product. Eyewash fountains should be provided in areas where there is any possibility that workers could be exposed to the substance. Follow safe industrial engineering/laboratory practices when handling any chemical.

Personal protective equipment	
Respiratory protection:	Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
Hand protection:	Wear protective gloves.
Eye protection:	Splash goggles.
Skin and body protection:	Lab coat.

No data available

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Form: Color: Odor: Odor threshold:	Liquid Clear Colorless - Very pale yellow No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic Viscosity:	No data available 145°C (293°F)/2.9kPa No data available 1.22 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 av Upper: No data av	ailable

Solubility(ies):

10. STABILITY AND REACTIVITY

Reactivity: Chemical Stability: Possibility of Hazardous Reactions: Conditions to avoid: Incompatible materials: Hazardous Decomposition Products: Not Available. Moisture sensitive. Light sensitive. No hazardous reactivity has been reported. Exposure to light. Exposure to moisture. Moisture sensitive. Strong oxidizing agents No data available

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	NTP:	No data available	OSHA:	No data available
Reproductive toxicity: No data available				
Routes of Exposure: Symptoms related to exposure: Overexposure may result in serious illnes Potential Health Effects: No specific information available; skin an Target organ(s):	s or death.	ntact, Ingestion, Skin contact It in irriatation. May be harm		d.
12. ECOLOGICAL INFORMATION				
Ecotoxicity				
Fish:	No data available			
Crustacea:	No data available			
Algae:	No data available			
Persistence and degradability:	No data available			
Bioaccumulative potential (BCF):	No data available			
Mobillity in soil:	No data available			
Partition coefficient: n-octanol/water (log Pow)	No data available			
Soil adsorption (Koc):	No data available			
Henry's Law: constant (PaM³/mol)	No data available			
13. DISPOSAL CONSIDERATIONS				
Disposal of product:	rules and regulation chemical incinerat assistance but doer regulatory complia	ons. You may be able to disso or equipped with an afterburr as not replace these laws, no ince according to the law. US a 40 CFR Parts 261. The proc	olve or mix material wit her and scrubber syste r does compliance in a EPA guidelines for Ide	mply with Federal, State and Local h a combustible solvent and burn in m. This section is intended to provid ccordance with this section ensure entification and Listing of Hazardous wed to enter the environment, drains
Disposal of container: Other considerations:	Dispose of as unu	sed product. Do not re-use en II, state and local regulations	mpty containers.	substance.
14. TRANSPORT INFORMATION				

DOT (US)

Non-hazardous for transportation.

ΙΑΤΑ

Non-hazardous for transportation.

TCI AMERICA

14. TRANSPORT INFORMATION

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

Other Information

NFPA Rating:

Health:	0	Health:	0
Flammability:	1	Flammability:	1
Instability:	0	Physical:	0

International Inventories

WHMIS hazard class: EC-No: D2A: Materials causing other toxic effects. (Very Toxic) 249-883-6

HMIS Classification:

16. OTHER INFORMATION

Revision date: 05/17/2016

Revision number: 3

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.