

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

www.TCIchemicals.com	Environmental Health Safety and Security +1- 503-286-7624
2. HAZARD(S) IDENTIFICATION	
OSHA Haz Com: CFR 1910.1200: WHMIS 2015:	Eye Damage/Irritation [Category 1] Flammable Liquids [Category 4] Corrosive to Metals [Category 1] Skin Corrosion/Irritation [Category 1C]
Signal word:	Danger!
Hazard Statement(s):	Combustible liquid May be corrosive to metals Causes severe skin burns and eye damage
Precautionary Statement(s):	
[Prevention]	Keep away from flames and hot surfaces. – No smoking. Keep only in original container. Do not breathe dusts or mists. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection.
[Response]	If swallowed: Rinse mouth. Do NOT induce vomiting. Immediately call a poison center or doctor. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a poison center or doctor. Wash contaminated clothing before reuse. If inhaled: Remove person to fresh air and keep comfortable for breathing. Immediately call a poison center or doctor. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a poison center or doctor. Absorb spillage to prevent material damage.
[Storage]	Store in corrosive resistant bottle or metal container with a resistant inner liner. Store in a well-ventilated place. Keep cool. Store locked up.
[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.).
Hazards not otherwise classified:	Lachrymator

Hazards not otherwise classified: [HNOC] 3,5-Difluorobenzyl Bromide D2631

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

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3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Substance
Components:	3,5-Difluorobenzyl Bromide
Percent:	>98.0%(GC)
CAS RN:	141776-91-2
Molecular Weight:	207.02
Chemical Formula:	C7H₅BrF₂
Synonyms:	α-Bromo-3,5-difluorotoluene

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. Immediately call a POISON CENTER or doctor/physician.
Skin contact:	Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.Immediately call a POISON CENTER or doctor/physician.
Ingestion:	Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting.
Symptoms/effects:	
Acute:	Pain. Redness.
Delayed:	No data available
Indication of any immediate medical at Not available. Notes to physician: No data available	tention:

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Unsuitable extinguishing media:	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:	These products include: Carbon oxides Halogenated compounds
Other specific hazards:	WARNING: Highly toxic HF gas is produced during combustion.
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. Ensure adequate ventilation. Entry to non-involved personnel should be controlled around the leakage area by roping off, 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.
Prevention of secondary hazards:	Remove all sources of ignition. Fire-extinguishing devices should be prepared in case of a fire. Use spark-proof tools and explosion-proof equipment.
7. HANDLING AND STORAGE	
Precautions for safe handling:	 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. May develop pressure. Open carefully. Use corrosive resistant equipment.
Conditions for safe storage, including a	
Storage conditions:	Keep container tightly closed. Store in a cool, dark and well-ventilated place. Store under inert gas. Protect from moisture. Store locked up. Store away from incompatible materials such as oxidizing agents. Moisture-sensitive
Packaging material:	Comply with laws. Keep only in original container.

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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:	Half or full facepiece 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:	Liquid Clear Very pale yellow - Pale y No data available No data available No data available	vellow	
Melting point/freezing point:	No data available	pH:	No data available
Boiling point/range:	65°C /0.60kPa (149°F)	Vapour pressure:	No data available.
Decomposition temperature:	No data available	Vapour density:	No data available
Relative density:	1.62	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):	81°C (178°F) No data available	Autoignition temperature: Flammability or explosive limits:	No data available
		Lower:	No data available
		Upper:	No data available
Solubility(ies): [Water] [Other solvents]	No data available No data available		

10. STABILITY AND REACTIVITY

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, Bases 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	NTP:	No data available	OSHA:	No data available
Reproductive toxicity: No data available				
Target organ(s):	No data available			
12. ECOLOGICAL INFORMATION				
Ecotoxicity: Fish:	No data available			
Ecotoxicity:	No data available No data available			
Ecotoxicity: Fish:				
Ecotoxicity: Fish: Crustacea: Algae:	No data available No data available			
Ecotoxicity: Fish: Crustacea:	No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF):	No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc):	No data available No data available No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow:	No data available No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³/mol):	No data available No data available No data available No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³ /mol): 13. DISPOSAL CONSIDERATIONS	No data available No data available No data available No data available No data available No data available No data available			
Ecotoxicity: Fish: Crustacea: Algae: Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³/mol):	No data available No data available	gulations. You may be able to c nical incinerator equipped with e assistance but does not repla nsure regulatory compliance ac	dissolve or mix ma an afterburner and ace these laws, nor coording to the law e listed in 40 CFR F	Parts 261. The product should not

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14. TRANSPORT INFORMATION

<u>DOT (US)</u> UN number: UN3265	Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s	Class or Division: 8 Corrosive material	Packing Group:
IATA UN number: UN3265	Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s	Class or Division: 8 Corrosive material	Packing Group: III
IMDG UN UN3265 numb er:	Proper Shipping Name: Corrosive liquid, acidic, organic, n.o.s	Class or Division: 8 Corrosive material	Packing Group: III
EmS number:	F-A, S-B		

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 a	and Reportable Quantity:	
SARA 313:		Not Listed	
SARA 302:		Not Listed	
State Regulation	<u>s</u>		
State Right-to-Kr	ow		
Massachuse	tts	Not Listed	
New Jersey		Not Listed	
Pennsylvania	a	Not Listed	
California Propos	sition 65:	Not Listed	
Other Information	<u>n</u>		
NFPA Rating:			HMIS Classificat
Health:	0		Health:
Flammability:	2		Flammability:
Instability:	0		Physical:

International Inventories

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.

Classification:

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