

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: Acute Toxicity - Oral [Category 4] Skin Corrosion/Irritation [Category 2] WHMIS 2015: Eye Damage/Irritation [Category 2A] Flammable Liquids [Category 4] Signal word: Warning! Combustible liquid Hazard Statement(s): Harmful if swallowed Causes skin irritation Causes serious eye irritation Pictogram(s) or Symbol(s):

None.

Precautionary Statement(s): [Prevention]

[Response]

[Storage] [Disposal] Keep away from flames and hot surfaces. - No smoking. Do not eat, drink or smoke when using this product. Wash hands and face thoroughly after handling. Wear protective gloves, eye protection. If swallowed: Call a poison center or doctor if you feel unwell. 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 in a well-ventilated place. Keep cool.

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: [HNOC]

4-(Trifluoromethyl)benzaldehyde T1091

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SAFETY DATA SHEET

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

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:	4-(Trifluoromethyl)benzaldehyde
Percent:	>95.0%(GC)
CAS RN:	455-19-6
Molecular Weight:	174.12
Chemical Formula:	CଃH₅F₃O
Synonyms:	α,α,α-Trifluoro-p-tolualdehyde
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
Skill contact.	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.
Lye contact.	Continue rinsing. If eye irritation persists: Get medical advice/attention.
Ingestion:	Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.
Our set of the state	
Symptoms/effects:	Dedeese
Acute:	Redness.
Delayed:	No data available
Indication of any immediate medical atte	ention:
Not available.	
Notes to physician:	
No data available	
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	
B. ACCIDENTAL RELEASE MEASU	KES
Personal precautions, protective equipment and emergency procedures:	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.
Environmental precautions:	Prevent product from entering drains.
	Absorb spilled material in a suitable absorbent (e.g. rag, dry sand, earth, saw-dust). In case of large
and cleaning up:	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, even and clothing.

Avoid contact with skin, eyes and clothing.
 Conditions for safe storage, including any incompatibilities

 Storage conditions:
 Keep container tightly closed. Store in a cool, dark and well-ventilated place.
Store under inert gas. Store away from incompatible materials such as oxidizing agents. Air-sensitive Comply with laws.

Packaging material:

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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 as possible so that workers should not be exposed directly. Also install safety shower and eye bath.
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 - Pale yellow Pungent No data available No data available		
Melting point/freezing point: Boiling point/range: Decomposition temperature: Relative density: Kinematic viscosity: Log Pow:	1°C (Freezing point) (34°F) 64°C /1.6kPa (147°F) No data available 1.30 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):	79°C (174°F) 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] Very soluble:	Very slightly soluble Many organic solvents		

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, Reducing agents Carbon dioxide, Carbon monoxide, Hydrogen fluoride

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			
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 (PaM³/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 on I, state and local regulations when		ne substance.
14. TRANSPORT INFORMATION				
DOT (US)	Non-hazardous for	r transportation.		
IATA	Non-hazardous for	r transportation.		
		r transportation.		
Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³ /mol): <u>13. DISPOSAL CONSIDERATIONS</u> Disposal of product: Disposal of container: Other considerations: <u>14. TRANSPORT INFORMATION</u> DOT (US)	No data available No data available No data available No data available No data available No data available No data available Recycle to process Local rules and reg and burn in a cher intended to provide with this section er Identification and L be allowed to ente Dispose of as unu: Observe all federation Non-hazardous for	gulations. You may be able to disso nical incinerator equipped with an a e assistance but does not replace to nsure regulatory compliance accorr Listing of Hazardous Waste are list r the environment, drains, water was sed product. Do not re-use empty of II, state and local regulations when r transportation.	olve or mix ma afterburner and hese laws, no ding to the law ed in 40 CFR l ays, or the soil containers.	terial with a combustible solvent d scrubber system. This section is r does compliance in accordance . US EPA guidelines for Parts 261. The product should not

15. REGULATORY INFORMATION

Toxic Substance Control Act (TSCA 8b.):

This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.

<u>US Federal Regu</u> CERCLA Hazardo SARA 313: SARA 302:	<u>lations</u> ous substance and Re	portable Quantity: Not Listed Not Listed		
State Regulation State Right-to-Kr Massachuse New Jersey Pennsylvania California Propos	now tts a	Not Listed Not Listed Not Listed Not Listed		
Other Informatio NFPA Rating: Health: Flammability: Instability:			HMIS Classification: Health: Flammability: Physical:	2 2 0
<u>International Inve</u> Canada: NDSL EC-No:	entories_	On NDSL 207-240-7		

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.