

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

#### 1. IDENTIFICATION

# TCI AMERICA SAFETY DATA SHEET

Product name: Product code:	Dimethylamine (ca. 10% in Tetrahydrofuran, ca. 2mol/L) D3948	
Product use: Restrictions on use:	For laboratory research purposes. Not for drug or household 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	Emergency telephone number Chemical Emergencies: TCI America (8:00am - 5:00pm) +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 an +1- 503-286-7624	PST
2. HAZARD(S) IDENTIFICATION		
OSHA Haz Com: CFR 1910.1200: WHMIS 2015:	Acute Toxicity - Oral [Category 4] Eye Damage/Irritation [Category 1] Sensitization - Skin [Category 1] Specific Target Organ Toxicity (Single Exposure) [Category 1] Specific Target Organ Toxicity (Single Exposure) [Category 2] Specific Target Organ Toxicity (Single Exposure) [Category 3] Specific Target Organ Toxicity (Repeated Exposure) [Category 1] Flammable Liquids [Category 2] Aquatic Hazard (Acute) [Category 3] Skin Corrosion/Irritation [Category 1C]	
Signal word:	Danger!	
Hazard Statement(s):	Highly flammable liquid and vapor Harmful if swallowed Causes severe skin burns and eye damage May cause an allergic skin reaction Harmful to aquatic life Causes damage to: Respiratory System Central Nervous System May cause damage to organs: Nervous System May cause respiratory irritation. Causes damage to organs through prolonged or repeated exposure: Liver Respiratory Systes System	tem Nervoi

#### Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

Keep away from heat, sparks, open flames and hot surfaces. – No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical, ventilating and lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not breathe mist, vapors or spray. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not eat, drink or smoke when using this product. Contaminated work clothing must not be allowed out of the workplace. Wash hands and face thoroughly after handling. Wear protective gloves, protective clothing, face protection.

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

[Response]

	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. If exposed: Call a poison center or doctor.
[Storage]	Store in a well-ventilated place. Keep container tightly closed. 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: [HNOC]	May form explosive peroxides.

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Mixture
Components:	Dimethylamine (ca. 10% in Tetrahydrofuran, ca. 2mol/L)
Percent:	
CAS RN:	124-40-3
Molecular Weight:	45.09
Chemical Formula:	C <sub>2</sub> H <sub>7</sub> N
Hazardous ingredient(s):	Dimethylamine (10%) 124-40-3
	Dimethylamine (10%) 124-40-3 Tetrahydrofuran (90%) 109-99-9

## 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:	May cause skin sensitization. May have effects on the respiratory tract.
Indication of any immediate medical	attention:
Not available.	
Notes to physician:	

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Notes to physician:
No data available
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## 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water in large amounts, 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 Closed containers may explode from heat of a fire.
Advice for firefighters:	Wear self-contained breathing apparatus if possible.

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6. ACCIDENTAL RELEASE MEASURES
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Personal precautions, protective equipment and emergency procedures:	Use extra personal protective equipment (self-contained breathing apparatus). 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.
Methods and materials for containment	
and cleaning up:	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 heat/sparks/open flame/hot surfacesNo smoking. 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. Confirm in advance if peroxides exist when operations involving heating such as distillation are carried out.
Conditions for safe storage, including	
Storage conditions:	Keep container tightly closed. Store in an explosion-poof refregerator.
	Store under inert gas. Store locked up.
	Store away from incompatible materials such as oxidizing agents.
	Heat-sensitive Air-sensitive
Packaging material:	Comply with laws.
8. EXPOSURE CONTROLS / PERS	SONAL PROTECTION
Exposure limits:	(THF) ACGIH TLV(TWA):50 ppm (skin) ACGIH TLV(STEL):100 ppm (skin) OSHA PEL(TWA):200 ppm
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 Colorless - Pale yellow No data available No data available No data available		
Melting point/freezing point:	No data available (THF) -108°C	pH:	No data available
Boiling point/range:	No data available (THF) 65°C	Vapour pressure:	No data available.
Decomposition temperature: Relative density: Kinematic viscosity:	No data available 0.85 No data available	Vapour density: Dynamic Viscosity:	No data available No data available
Log Pow:	No data available	Evaporation rate(Butyl Acetate=1):	No data available
Log Pow:	(THF) 0.46		
Flash point: Flammability(solid, gas):	-36°C (-33°F) No data available	Autoignition temperature: Flammability or explosive limits:	No data available
		Lower: Upper:	No data available 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 May form explosive peroxides. No special reactivity has been reported. Spark, Open flame, Static discharge, Air Oxidizing agents, Acids Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx) **11. TOXICOLOGICAL INFORMATION** 

Acute Toxic No data avai					
<b>Skin corrosi</b> No data avai	<b>on/irritation:</b> lable				
<b>Serious eye</b> No data avai	damage/irritation: able				
<b>Respiratory</b> No data avai	or skin sensitization: lable				
<b>Germ cell m</b> No data avai					
<b>Carcinogeni</b> No data avai					
IARC:	No data available	NTP:	No data available	OSHA	No data available
<b>Reproductiv</b> No data avai					
Target organ Causes	n(s): damage to: Respiratory System C	entral Nervous	System		

Causes damage to organs through prolonged or repeated exposure: Liver Respiratory System Nervous System

12. ECOLOGICAL INFORMATION

May cause respiratory irritation.

May cause damage to organs: Nervous System

Ecotoxicity: Fish: Crustacea: Algae:	No data available No data available No data available
Persistence / degradability: Bioaccumulative potential(BCF): Mobility in soil	No data available No data available
Log Pow: Soil adsorption (Koc): Henry's Law (PaM ³/mol):	No data available No data available 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<br/>Local rules and regulations. You may be able to dissolve or mix material with a combustible solvent<br/>and burn in a chemical incinerator equipped with an afterburner and scrubber system. This section is<br/>intended to provide assistance but does not replace these laws, nor does compliance in accordance<br/>with this section ensure regulatory compliance according to the law. US EPA guidelines for<br/>Identification and Listing of Hazardous Waste are listed in 40 CFR Parts 261. The product should not<br/>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.<br/>Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

14. HO (NOI OK				
<u>DOT (US)</u> UN number:	Proper Shipping Name:	Class or Division:	Subrisk(s):	Packing Group:
JN2924	Flammable liquids, corrosive, n.o.s	3 Flammable liquid	8 Corrosive material	II
ATA				
JN number:	Proper Shipping Name:	Class or Division:	Subrisk(s):	Packing Group:
JN2924	Flammable liquid, corrosive, n.o.s	3 Flammable liquid	8 Corrosive material	
<u>MDG</u> JN UN2924	Drener Chinning Name	Class or Division:	Subrick(a).	Decking Crown
numb	Proper Shipping Name: Flammable liquid, corrosive, n.o.s	3 Flammable liquid	Subrisk(s): 8 Corrosive material	Packing Group:
er:				
EmS number:	F-E, S-C			
	RY INFORMATION			
5. REGULATU	RTINFORMATION			
ovic Substance (	Control Act (TSCA 8b.):			
	the EPA Toxic Substances Control Act (T	SCA) inventory.		
·	, , , , , , , , , , , , , , , , , , ,	, ,		
JS Federal Regula				
SARA 313:	us substance and Reportable Quantity: Listed			
SARA 302:	Not Listed			
	Not Liston			
State Regulations	_			
State Right-to-Kno	W			
Massachusett	s Listed			
New Jersey	Listed			
Pennsylvania	Listed			
California Proposi	tion 65: Not Listed			
Other Information				
VFPA Rating:	-	HMIS Classification:		
Health:	2	Health:	2	
Flammability:	4	Flammability:	4	
Instability:	3	Physical:	3	
-				
nternational Inver	<u>ntories</u>			

#### 16. OTHER INFORMATION

#### **Revision date:** 07/06/2018

#### Revision number: 1

Canada: DSL EC-No:

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.

On DSL

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