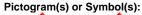


Revision number: 1 Revision date: 07/06/2018

1. IDENTIFICATION

TCI AMERICA SAFETY DATA SHEET

Product name: Product code: Product use:	Dimethylamine (ca. 11% in Ethanol, ca. 2.0mol/L) D3936 For laboratory research purposes.	
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	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
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] Germ Cell Mutagenicity [Category 1B] Toxic to Reproduction [Category 1A] Specific Target Organ Toxicity (Single Exposure) [Categor Specific Target Organ Toxicity (Single Exposure) [Categor Specific Target Organ Toxicity (Repeated Exposure) [Categor Specific Target Organ Toxicity (Repeated Exposure) [Cate Specific Target Organ Toxicity (Repeated Exposure) [Cate Specific Target Organ Toxicity (Repeated Exposure) [Cate Flammable Liquids [Category 2] Aquatic Hazard (Acute) [Category 3] Skin Corrosion/Irritation [Category 1B]	ory 3] tegory 1]
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 May cause genetic defects May damage fertility or the unborn child Harmful to aquatic life Causes damage to: Respiratory System Central Nervous May cause respiratory irritation. May cause drowsiness o Causes damage to organs through prolonged or repeated May cause damage to organs through prolonged or repeated	r dizziness. d exposure: Liver Respiratory System





Precautionary Statement(s): [Prevention]

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. 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.

[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. 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]	Lachrymator

3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture:	Mixture
Components:	Dimethylamine (ca. 11% in Ethanol, ca. 2.0mol/L)
Percent:	
CAS RN:	124-40-3
Molecular Weight:	45.09
Chemical Formula:	C ₂ H ₇ N
Hazardous ingredient(s):	Dimethylamine (11%) 124-40-3
	Ethanol (89%) 64-17-5

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:	Dizziness. Pain. Redness. Drowsiness.
Delayed:	May cause heritable genetic damage in humans. May cause skin sensitization. May have effects on the respiratory tract.

Indication of any immediate medical attention: Not available. Notes to physician: No data available

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.				
6. ACCIDENTAL RELEASE MEASURES					

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:
Methods and materials for containment
and cleaning up:Prevent product from entering drains.
Absorb spilled material in dry sand or inert absorbent before recovering it into an airtight container. 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 STOPACE	
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 all contact! May develop pressure. Open carefully.
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 / PER	SONAL PROTECTION
Exposure limits:	(Ethanol) ACGIH TLV(STEL):1000 ppm OSHA PEL(TWA):1000 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 - Almost colorless No data available No data available No data available	S	
Melting point/freezing point:	No data available (Ethanol) -117°C	pH:	No data available
Boiling point/range:	No data available (Ethanol) 79°C	Vapour pressure:	No data available.
Decomposition temperature:	No data available	Vapour density:	No data available
Relative density:	No data available	Dynamic Viscosity:	No data available
Kinematic viscosity:	No data available	,	
Log Pow:	No data available	Evaporation rate(Butyl Acetate=1):	No data available
Log Pow:	(Ethanol) -0.32		
Flash point:	No data available (Ethanol) 13°C	Autoignition temperature:	No data available
Flammability(solid, gas):	No data available	Flammability or explosive limits: Lower:	No data available
		Upper:	No data available
Solubility(ies):			
[Water]	No data available		
[Other solvents]	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. Spark, Open flame, Static discharge Oxidizing agents, Acids Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx) 11. TOXICOLOGICAL INFORMATION

Acute Toxi No data ava					
Skin corros No data ava	ion/irritation: ilable				
Serious eye No data ava	e damage/irritation: ilable				
Respiratory No data ava	/ or skin sensitization: ilable				
Germ cell n No data ava	nutagenicity: ilable				
Carcinoger No data ava					
IARC:	No data available	NTP:	No data available	OSHA:	No data available
Reproducti No data ava					
	damage to: Respiratory System	Central Nervous	System		

May cause respiratory irritation. May cause drowsiness or dizziness.

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

May cause damage to organs through prolonged or repeated exposure: Nervous System

12. ECOLOGICAL INFORMATION

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):	-0.2 434.9 - 508 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: Dispose of as unused product. Do not re-use empty containers. Observe all federal, state and local regulations when disposing of the substance.

14. TRANSPORT INFORMATION

<u>DOT (US)</u> UN number: UN2924	Proper Shipping Name: Flammable liquids, corrosive,	n.o.s	Class or Division: 3 Flammable liquid		Subrisk(s): 8 Corrosive material		Packing Group: II
<u>IATA</u> UN number: UN2924	Proper Shipping Name: Flammable liquid, corrosive, r	1.0.5	Class or Division: 3 Flammable liquid		Subrisk(s): 8 Corrosive material		Packing Group: II
IMDG UN UN2924 numb er:	Proper Shipping Name: Flammable liquid, corrosive, r	1.O.S	Class or Division: 3 Flammable liquid		Subrisk(s): 8 Corrosive material		Packing Group: II
EmS number:	F-E, S-	С					
15. REGULATORY INFORMATION							
Toxic Substance Control Act (TSCA 8b.): This product is ON the EPA Toxic Substances Control Act (TSCA) inventory.							
US Federal Regulations CERCLA Hazardous substance and Reportable Quantity: SARA 313: Listed SARA 302: Not Listed							
State Regulations State Right-to-Know	w						
Massachusetts							
New Jersey Pennsylvania	Listed Listed						
California Proposit		ted					

Other Information	<u>n</u>			
NFPA Rating:			HMIS Classification:	
Health:	3		Health:	3
Flammability:	4		Flammability:	4
Instability:	0		Physical:	0
International Inve Canada: DSL EC-No:	entories_	On DSL 204-697-4		

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.