

Revision number: 2 Revision date: 10/06/2014

1. IDENTIFICATION

Product name: Product code: N,N-Dimethyldecylamine D2288

For laboratory research purposes.

Not for drug or household use.

TCI AMERICA

SAFETY DATA SHEET

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] Eye Damage/Irritation [Category 1] Flammable Liquids [Category 4] Skin Corrosion/Irritation [Category 1C]

Danger!

Signal word:

Hazard Statement(s):

Causes serious eye damage Causes severe skin burns and eye damage Combustible liquid Harmful if swallowed Harmful in contact with skin Harmful if inhaled

Pictogram(s) or Symbol(s):



Precautionary Statement(s): [Prevention]

[Response]

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. Do not breathe dusts or mists. Wear protective gloves, protective clothing, eye protection and face protection. Wear eye protection. Wear face protection (full length face shield). Keep away from heat, sparks, open flames or other hot surfaces. - No smoking. Wear protective gloves, eye protection and face protection.

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. If swallowed: Rinse mouth. Do NOT induce vomiting. If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. 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. In case of fire: Use dry chemical, CO2, water spray or alcohol-resistant foam to extinguish.

[Storage]

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

Store locked up. Store in well-ventilated place. Keep cool.

2. HAZARD(S) IDENTIFICATION

[Disposal]

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:	Substance N,N-Dimethyldecylamine
Percent:	>95.0%(GC)(T)
CAS Number:	1120-24-7
Molecular Weight:	185.36
Chemical Formula:	$C_{12}H_{27}N$
Synonyms:	1-(Dimethylamino)decane
4. FIRST-AID MEASURES	
Inhalation:	Immediately call a poison center or doctor. Effects of exposure (inhalation) to substance may be delayed. 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.
Skin contact:	For severe burns, immediate medical attention is required. Immediately call a poison center or doctor. Remove and wash contaminated clothing before re-use. Remove and isolate contaminated clothing and shoes. In 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.
Eye contact:	IMMEDIATELY flush eyes with running water for at least 15 minutes, keeping eyelids open. Eye contact with vapors or substance may cause severe injury, burns, or death. Call emergency medical service. 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. Do not induce vomiting with out medical advice. 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:	
Acute: Delayed:	Pain. Redness. No data available
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. WARNING: It might be hazardous to the person providing aid to give mouth-to-mouth respiration, because the inhaled material is corrosive. For severe burns, immediate medical attention is required. 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, CO ₂ or water spray. Cor
	fighting operations.

Dry chemical, CO_2 or water spray. Consult with local fire authorities before attempting large scale fire fighting operations.

Specific hazards arising from the chemical

Hazardous combustion products: Other specific hazards: These products include: Carbon oxides Nitrogen oxides 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. CAUTION: All these products have a very low flash point: Use of water spray when fighting fire may be inefficient. Do not use straight streams. Runoff to sewer may create fire or explosion hazard. Containers may explode when heated. Move containers from fire area if you can do it without risk.

5. FIRE-FIGHTING MEASURES

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

Personal precautions:	Avoid contact with skin, eyes, and clothing. Keep people away from and upwind of spill/leak. Use spark- proof tools and explosion-proof equipment. Remove all sources of ignition. Do not touch 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:	Wear eye protection (splash goggles) and face protection (full length face shield). Lab coat. Vapor respirator. Be sure to use a MSHA/NIOSH approved respirator or equivalent. Wear protective gloves (nitrile).
Emergency procedures:	Isolate area until gas has dispersed. 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 needed.

Methods and materials for containment and cleaning up:

ELIMINATE all ignition sources (no smoking, flares, sparks, or flames in immediate area). All equipment used when handling the product must be grounded. 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.

7. HANDLING AND STORAGE	
Precautions for safe handling:	Do NOT breath gas, fumes, vapor, or spray. Manipulate under an adequate fume hood. Do not ingest. Avoid contact with skin and eyes. Avoid contact with skin. Keep away from heat and sources of ignition. Use explosion-proof equipment. Use only non-sparking hand tool when handling this product. Ground all equipment containing material. Take measures to prevent build up of electrostatic charge. 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 away from sources of ignition. Store and use away from heat, sparks, open flame, or any other ignition source. Store locked up. Keep containers tightly closed 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:	Bases, Combustible substances, Store away from oxidizing agents

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure limits:

No data available

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C):	Liquid
Form:	Clear
Color:	Colorless - Almost colorless
Odor:	No data available
Odor threshold:	No data available

N,N-Dimethyldecylamine

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9. PHYSICAL AND CHEMICA			
Melting point/freezing point:	No data available	pH:	No data available
•••		•	No data available
Boiling point/range:	235°C (455°F)	Vapor pressure:	
Decomposition temperature:	No data available	Vapor density:	No data available
Relative density:	0.78	Dynamic Viscosity:	No data available
Cinematic Viscosity:	No data available		
Dentition ocofficient.	No data available	Even enetien neter	Ne dete evelleble
Partition coefficient:	No data available	Evaporation rate:	No data available
-octanol/water (log P _{ow})		(Butyl Acetate = 1)	
Flash point:	92°C (198°F)	Autoignition temperature:	No data available
-	. ,		
lammability (solid, gas):	No data available	Flammability or explosive li	
		Lower: No dat	a available
		Upper: No dat	a available
		opper. No da	
Solubility(ies):			
J (1)			
0. STABILITY AND REACTI	VIIY		
Reactivity:	Not Available.		
		anded stars as anditions. (Cas Castis	n 7)
chemical Stability:	Stable under recomm	nended storage conditions. (See Sectio	n 7)
Possibility of Hazardous Reaction		nmable/explosive vapor-air mixture.	
Conditions to avoid:	Avoid excessive heat	t and light.	
ncompatible materials:	Oxidizing agents		
lazardous Decomposition Prod	ucts: No data available		
11. TOXICOLOGICAL INFOR	MATION		
cute Toxicity:			
lo data available			
kin corrosion/irritation:			
lo data available			
Conierre erre demonre/innitetien.			
Serious eye damage/irritation:			
lo data available			
Respiratory or skin sensitization	1-		
No data available	-		
Germ cell mutagenicity:			
lo data available			
Carcinogenicity:			
lo data available			
IARC: No data available	NTP: N	lo data available	OSHA: No data available
Reproductive toxicity:			
lo data available			
outes of Exposure:	Inhalation, Eye conta	ct, Ingestion, Skin contact.	
symptoms related to exposure:			
			esult in inflammation; characterized by itching
		It in corneal damage or blindness.	
otential Health Effects:		5	
	kin and eve contact may result in	n irriatation. May be harmful if inhaled	or ingested.
Target organ(s):	No data available		
a got of guillo).			
2. ECOLOGICAL INFORMA	ΠΟΝ		
cotoxicity			
Fish:	No data available		
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Fish: Crustacea: Algae: No data available No data available No data available **TCI AMERICA**

12. ECOLOGICAL INFORMATION

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:	No data available
constant (PaM ³ /mol)	

13. DISPOSAL CONSIDERAT	
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.
Other considerations:	Observe all federal, state and local regulations when disposing of the substance.

HMIS Classification:

14. TRANSPORT INFORMATION

DOT (US) UN number: UN2735	Proper Shipping Name: Amines, liquid, corrosive, n.o.s.	Class or Division: 8 Corrosive material	Packing Group: 	
IATA UN number: UN2735	Proper Shipping Name: Amines, liquid, corrosive, n.o.s.	Class or Division: 8 Corrosive material	Packing Group:	
IMDG UN number: UN2735	Proper Shipping Name: Amines, liquid, corrosive, n.o.s.	Class or Division: 8 Corrosive material	Packing Group: 	
EmS number:	F-A, S-B			

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:	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:	2	Health:	2
Flammability:	2	Flammability:	2
Instability:	0	Physical:	0

International Inventories

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15. REGULATORY INFORMATION WHMIS hazard class: E: Corrosive material. B3: Combustible Liquid. D2A: Materials causing other toxic effects. (Very Toxic) 214-302-7

16. OTHER INFORMATION

Revision date: 10/06/2014

Revision number: 2

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.