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SAFETY DATA SHEET

Version 3.3 Revision Date 06/26/2014 Print Date 11/10/2018

1. PRODUCT AND COMPANY IDENTIFICATION 1.1 **Product identifiers** Product name N,N-Diethylmethylamine Product Number D98203 Brand Aldrich CAS-No. 616-39-7 : 1.2 Relevant identified uses of the substance or mixture and uses advised against : Laboratory chemicals, Manufacture of substances Identified uses Details of the supplier of the safety data sheet 1.3 Company Sigma-Aldrich 3050 Spruce Street SAINT LOUIS MO 63103 USA +1 800-325-5832 Telephone Fax +1 800-325-5052 1.4 **Emergency telephone number**

Energency telephone numbe

Emergency Phone # : +1-703-527-3887 (CHEMTREC)

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS) Flammable liquids (Category 2), H225 Acute toxicity, Oral (Category 3), H301 Acute toxicity, Inhalation (Category 4), H332 Skin corrosion (Category 1B), H314 Serious eye damage (Category 1), H318

For the full text of the H-Statements mentioned in this Section, see Section 16.

2.2 GHS Label elements, including precautionary statements

Pictogram



Signal word	Danger
Hazard statement(s) H225 H301	Highly flammable liquid and vapour. Toxic if swallowed.
H314 H332	Causes severe skin burns and eye damage. Harmful if inhaled.
Precautionary statement(s) P210 P233 P240 P241 P242	Keep away from heat/sparks/open flames/hot surfaces No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ ventilating/ lighting/ equipment. Use only non-sparking tools.

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P243 P261 P264 P270 P271 P280	Take precautionary measures against static discharge. Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray. Wash skin thoroughly after handling. Do not eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/ protective clothing/ eye protection/ face protection.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P301 + P330 + P331	IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER or doctor/ physician.
P321	Specific treatment (see supplemental first aid instructions on this label).
P363	Wash contaminated clothing before reuse.
P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.
P403 + P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 **Substances**

Synonyms	:	N-Methyldiethylamine
Formula Molecular Weight CAS-No. EC-No.	:	C ₅ H ₁₃ N 87.16 g/mol 616-39-7 210-480-5

Hazardous components

Component	Classification	Concentration
Diethylmethylamine		
	Flam. Liq. 2; Acute Tox. 3;	-
	Acute Tox. 4; Skin Corr. 1B;	
	Eye Dam. 1; H225, H301,	
	H314, H332	
For the full text of the H-Statements mentioned in this Section, see Section 16		

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4. FIRST AID MEASURES

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

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If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11

4.3 Indication of any immediate medical attention and special treatment needed no data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

For small (incipient) fires, use media such as "alcohol" foam, dry chemical, or carbon dioxide. For large fires, apply water from as far as possible. Use very large quantities (flooding) of water applied as a mist or spray; solid streams of water may be ineffective. Cool all affected containers with flooding quantities of water.

5.2 Special hazards arising from the substance or mixture Carbon oxides, nitrogen oxides (NOx)

5.3 Advice for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

5.4 Further information

Use water spray to cool unopened containers.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas. For personal protection see section 8.

6.2 Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13).

6.4 **Reference to other sections** For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Use explosion-proof equipment.Keep away from sources of ignition - No smoking.Take measures to prevent the build up of electrostatic charge. For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Store under inert gas. Sensitive to carbon dioxide

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

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8.2 Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, Flame retardant antistatic protective clothing, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type AXBEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a)	Appearance	Form: clear, liquid Colour: colourless
b)	Odour	no data available
c)	Odour Threshold	no data available
d)	рН	no data available
e)	Melting point/freezing point	no data available
f)	Initial boiling point and boiling range	63 - 65 °C (145 - 149 °F) - lit.
g)	Flash point	-24 °C (-11 °F) - closed cup
h)	Evapouration rate	no data available
i)	Flammability (solid, gas)	no data available
j)	Upper/lower flammability or explosive limits	no data available
k)	Vapour pressure	no data available
I)	Vapour density	no data available
m)	Relative density	0.72 g/mL at 25 °C (77 °F)
n)	Water solubility	no data available
0)	Partition coefficient: n- octanol/water	log Pow: 1.087
p)	Auto-ignition temperature	no data available

q)	Decomposition	no data available
	temperature	

- r) Viscosity no data available
- s) Explosive properties no data available
- t) Oxidizing properties no data available
- 9.2 Other safety information no data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

no data available

10.2 Chemical stability Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions Vapours may form explosive mixture with air.

10.4 Conditions to avoid Heat, flames and sparks. Extremes of temperature and direct sunlight.

- **10.5** Incompatible materials Strong oxidizing agents
- **10.6 Hazardous decomposition products** Other decomposition products - no data available In the event of fire: see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity no data available

Dermal: no data available

no data available

Skin corrosion/irritation no data available

Serious eye damage/eye irritation no data available

Respiratory or skin sensitisation no data available

Germ cell mutagenicity no data available

Carcinogenicity

- IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
- ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
- NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
- OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity

no data available

no data available

Specific target organ toxicity - single exposure no data available

Specific target organ toxicity - repeated exposure no data available

Aspiration hazard

no data available

Additional Information

RTECS: Not available

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

no data available Toxicity to fish

LC50 - Pimephales promelas (fathead minnow) - 106.3 mg/l - 96 h

- 12.2 Persistence and degradability no data available
- **12.3 Bioaccumulative potential** no data available
- 12.4 Mobility in soil no data available

12.5 Results of PBT and vPvB assessment PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

no data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

UN number: 2733 Class: 3 (8) Packing group: II Proper shipping name: Amine, flammable, corrosive, n.o.s. (Diethylmethylamine) Marine pollutant: No Poison Inhalation Hazard: No

IMDG

UN number: 2733 Class: 3 (8) Packing group: II EMS-No: F-E, S-C Proper shipping name: AMINES, FLAMMABLE, CORROSIVE, N.O.S. (Diethylmethylamine) Marine pollutant: No

ΙΑΤΑ

UN number: 2733 Class: 3 (8) Packing group: II Proper shipping name: Amines, flammable, corrosive, n.o.s. (Diethylmethylamine)

15. REGULATORY INFORMATION

SARA 302 Components

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

CAS-No.	Revision Date
616-39-7	
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616-39-7	
	616-39-7 CAS-No.

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3.

Acute Tox. Eye Dam. Flam. Liq. H225 H301 H314 H318 H332 Skin Corr.	Acute toxicity Serious eye damage Flammable liquids Highly flammable liquid and vapour. Toxic if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. Harmful if inhaled. Skin corrosion
HMIS Rating Health hazard: Chronic Health Haz Flammability: Physical Hazard	2 ard: 4 0
NFPA Rating Health hazard: Fire Hazard: Reactivity Hazard: Health hazard:	2 4 0 3

3

0

Further information

Reactivity Hazard:

Fire Hazard:

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Preparation Information Sigma-Aldrich Corporation Product Safety – Americas Region 1-800-521-8956

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