# 1 Identification

Product identifier

Product name: N,N-Dimethyl-n-octylamine

Stock number: A12546, L04638

**CAS Number:** 7378-99-6 **EC** number: 230-939-3

Relevant identified uses of the substance or mixture and uses advised against.

Identified use: SU24 Scientific research and development

Details of the supplier of the safety data sheet

Details of the supplier of the safety da Manufacturer/Supplier:
Alfa Aesar
Thermo Fisher Scientific Chemicals, Inc. 30 Bond Street
Ward Hill, MA 01835-8099
Tel: 800-343-0660
Fax: 800-322-4757

Email: tech@alfa.com www.alfa.com

Information Department: Health, Safety and Environmental Department

Emergency telephone number:
During normal business hours (Monday-Friday, 8am-7pm EST), call (800) 343-0660. After normal business hours, call Carechem 24 at (866) 928-0789.

### 2 Hazard(s) identification

Classification of the substance or mixture in accordance with 29 CFR 1910 (OSHA HCS)



GHS06 Skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.



GHS05 Corrosion

Skin Corr. 1B H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.

H227 Combustible liquid. **Hazards not otherwise classified** No information known.

Label elements

GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms





GHS05 GHS06

Signal word Danger Hazard statements

H227 Combustible liquid. H301 Toxic if swallowed. H314 Causes severe skin burns and eye damage.

Precautionary statements

Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection.

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P304+P340 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Immediately call a POISON CENTER/doctor.

Store locked up.

Dispose of contents/container in accordance with local/regional/international regulations

P501 Dispose of contents/container in accordance with local/regional/national/international regulations. **WHMIS classification** 

B3 - Combustible liquid D1A - Very toxic material causing immediate and serious toxic effects D2B - Toxic material causing other toxic effects E - Corrosive material



Classification system

HMIS ratings (scale 0-4) (Hazardous Materials Identification System)



Health (acute effects) = 3
Flammability = 2
Physical Hazard = 1

Other hazards

Results of PBT and vPvB assessment PBT: Not applicable. vPvB: Not applicable.

USA

Product name: N,N-Dimethyl-n-octylamine

(Contd. of page 1)

### 3 Composition/information on ingredients

Chemical characterization: Substances CAS# Description: 7378-99-6 N,N-Dimethyl-n-octylamine Concentration: ≤100%

Identification number(s): EC number: 230-939-3

#### 4 First-aid measures

Description of first aid measures

General information
Immediately remove any clothing soiled by the product.
In case of irregular breathing or respiratory arrest provide artificial respiration.

After inhalation
Supply fresh air. If required, provide artificial respiration. Keep patient warm.
Seek immediate medical advice.

After skin contact

Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

After eye contact Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing Do not induce vomiting; immediately call for medical help.

Information for doctor

Most important symples and affects between

Causes severe skin burns.
Toxic if swallowed.

Causes serious eye damage.

Indication of any immediate medical attention and special treatment needed No further relevant information available.

#### 5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents Carbon dioxide, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
Special hazards arising from the substance or mixture
If this product is involved in a fire, the following can be released:
Carbon monoxide and carbon dioxide
Nitrogen oxides (NOX)
Advice for firefighters
Protective equipment:
Wear self-contained respirator.
Wear fully protective impervious suit

Wear fully protective impervious suit.

# 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Environmental precautions: Do not allow product to reach sewage system or any water course.
Methods and material for containment and cleaning up:
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralizing agent.
Dispose of contaminated material as waste according to section 13.

Dispose of contaminated material as waste according to section 13.

Ensure adequate ventilation.

Prevention of secondary hazards: Keep away from ignition sources.

Reference to other sections

See Section 7 for information on safe handling

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

### 7 Handling and storage

Handling

Precautions for safe handling
Precautions for safe handling
Handle under dry protective gas.
Keep container tightly sealed.
Store in cool, dry place in tightly closed containers.
Ensure good ventilation at the workplace.

Information about protection against explosions and fires: Keep ignition sources away.

Conditions for safe storage, including any incompatibilities
Storage
Requirements to be met by storerooms and receptacles: No special requirements.
Information about storage in one common storage facility:

Store away from air.
Do not store together with acids.
Store away from oxidizing agents.
Further information about storage conditions:

Store under dry inert gas.
This product is air sensitive.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed containers.
Specific end use(s) No further relevant information available.

# 8 Exposure controls/personal protection

Additional information about design of technical systems:
Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Control parameters

Components with limit values that require monitoring at the workplace:
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Additional information: No data

(Contd. on page 3)

# Product name: N,N-Dimethyl-n-octylamine

(Contd. of page 2)

Exposure controls

Personal protective equipment

General protective and hygienic measures

The usual precautionary measures for handling chemicals should be followed.

Keep away from foodsulfs, beverages and feed.

Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.

wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Maintain an ergonomically appropriate working environment.

Breathing equipment: Use suitable respirator when high concentrations are present.

Recommended filter device for short term use:

Use a respirator with multi-purpose combination (US) or type ABEK (EN 14387) as a backup to engineering controls. Risk assessment should be performed to determine if air-purifying respirators are appropriate. Only use equipment tested and approved under appropriate government standards such as NIOSH (USA) or CEN (EU).

Protection of hands:

Impervious gloves

Impervious gloves
Check protective gloves prior to each use for their proper condition.
The selection of suitable gloves not only depends on the material, but also on quality. Quality will vary from manufacturer to manufacturer.

Material of gloves Butyl rubber, BR
Penetration time of glove material (in minutes) 480
Glove thickness 0.3 mm

Eye protection: Tightly sealed goggles Full face protection

**Body protection:** Protective work clothing.

# 9 Physical and chemical properties

Information on basic physical and chemical properties

General Information

Appearance: Form:

Odor:

Not determined Odor threshold: Not determined. Not determined.

pH-value:

Change in condition Melting point/Melting range: Boiling point/Boiling range: Sublimation temperature / start:

-57 °C (-71 °F) 195 °C (383 °F) Not determined Flash point: Flammability (solid, gaseous) 65 °C (149 °F) Not determined Ignition temperature: Decomposition temperature: Not determined Not determined Not determined Auto igniting:

Danger of explosion: Explosion limits: Lower: Upper: Not determined Not determined Vapor pressure: Density at 20 °C (68 °F): Relative density Vapor density

Not determined 0.765 g/cm³ (6.384 lbs/gal) Not determined.

Not determined Not determined.

Not determined.

Evaporation rate Solubility in / Miscibility with Water: Not determined Partition coefficient (n-octanol/water): Not determined.

Viscosity: dynamic: kinematic:

Not determined.

Not determined.

Other information

No further relevant information available.

# 10 Stability and reactivity

Reactivity No information known.

Chemical stability Stable under recommended storage conditions.

Thermal decomposition / conditions to be avoided: Decomposition will not occur if used and stored according to specifications.

Possibility of hazardous reactions Reacts with strong oxidizing agents

Conditions to avoid No further relevant information available.

Incompatible materials:

Acids

Air Oxidizing agents

Hazardous decomposition products: Carbon monoxide and carbon dioxide Nitrogen oxides

# 11 Toxicological information

Information on toxicological effects

Acute toxicity: Toxic if swallowed.

Swallowing will lead to a strong corrosive effect on mouth and throat and to the danger of perforation of esophagus and stomach. The Registry of Toxic Effects of Chemical Substances (RTECS) contains acute toxicity data for this substance.

LD/LC50 values that are relevant for classification:

Oral LD50 162 mg/kg (rat)

Skin irritation or corrosion: Causes severe skin burns. Eye irritation or corrosion: Causes serious eye damage.

Sensitization: No sensitizing effects known.

Germ cell mutagenicity: No effects known.

Carcinogenicity: No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

(Contd. on page 4)

# Product name: N,N-Dimethyl-n-octylamine

(Contd. of page 3)

Reproductive toxicity: No effects known.

Specific target organ system toxicity - repeated exposure: No effects known.

Specific target organ system toxicity - single exposure: No effects known.

Aspiration hazard: No effects known.

Subacute to chronic toxicity: No effects known.

Additional toxicological information: To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

Carcinogenic categories
OSHA-Ca (Occupational Safety & Health Administration) Substance is not listed.

### 12 Ecological information

Toxicity
Aquatic toxicity: No further relevant information available.
Persistence and degradability No further relevant information available.
Bioaccumulative potential No further relevant information available.
Mobility in soil No further relevant information available.
Additional ecological information:
General notes:
Do not allow undiluted product or large quantities to reach ground water, water course or sewage system.
Avoid transfer into the environment.

Avoid transfer into the environment.

Results of PBT and vPvB assessment
PBT: Not applicable.

vPvB: Not applicable.

Other adverse effects No further relevant information available.

# 13 Disposal considerations

Waste treatment methods

Recommendation Consult state, local or national regulations to ensure proper disposal. Uncleaned packagings: Recommendation: Disposal must be made according to official regulations.

14 I	Iransport	information
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DOT, IMDG, IATA	UN2922
UN proper shipping name DOT ADR IMDG, IATA	Corrosive liquids, toxic, n.o.s. (N,N-Dimethyl-n-octylamine) 2922 Corrosive liquids, toxic, n.o.s. (N,N-Dimethyl-n-octylamine) CORROSIVE LIQUID, TOXIC, N.O.S. (N,N-Dimethyl-n-octylamine)
ADR	2922 Corrosive liquids, toxic, n.o.s. (N,N-Dimethyl-n-octylamine)

#### Transport hazard class(es)

DOT















	\_/
Class	



Packing group DOT, ADR, IMDG, IATA	

Environmental hazards:

Special precautions for user EMS Number:

8+6.1 Ш

8+6.1

Not applicable.

Warning: Corrosive substances F-A,S-B

8 (CT1) Corrosive substances 8+6.1

8 Corrosive substances

8 Corrosive substances.

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

DOT

Marine Pollutant (DOT):

UN "Model Regulation":

No

UN2922, Corrosive liquids, toxic, n.o.s. (N,N-Dimethyl-n-octylamine), 8 (6.1), III

# 15 Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture GHS label elements The product is classified and labeled in accordance with 29 CFR 1910 (OSHA HCS) Hazard pictograms





GHS05 GHS06

Signal word Danger Hazard statements H227 Combustible liquid. H301 Toxic if swallowed.

(Contd. on page 5)

(Contd. of page 4)

# Product name: N,N-Dimethyl-n-octylamine

H314 Causes severe skin burns and eye damage.

Precautionary statements
P210
Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not breathe dust/fume/gas/mist/vapours/spray.
Wear protective gloves/protective clothing/eye protection.
P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Immediately call a POISON CENTER/doctor.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations

Dispose of contents/container in accordance with local/regional/national/international regulations.

Dispose of contents/container in accordance with local/regional/national/international regulations.

National regulations
All components of this product are listed in the U.S. Environmental Protection Agency Toxic Substances Control Act Chemical substance Inventory.
All components of this product are listed on the Canadian Domestic Substances List (DSL).

SARA Section 313 (specific toxic chemical listings) Substance is not listed.
California Proposition 65
Prop 65 - Chemicals known to cause cancer Substance is not listed.
Prop 65 - Developmental toxicity Substance is not listed.
Prop 65 - Developmental toxicity, female Substance is not listed.
Prop 65 - Developmental toxicity, male Substance is not listed.
Information about limitation of use: For use only by technically qualified individuals.
Other regulations, limitations and prohibitive regulations
Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No. 1907/2006. Substance is not listed.
The conditions of restrictions according to Article 67 and Annex XVII of the Regulation (EC) No 1907/2006 (REACH) for the manufacturing, placing on the market and use must be observed.

Substance is not listed.

Annex XIV of the REACH Regulations (requiring Authorisation for use) Substance is not listed.

Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### 16 Other information

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

Department issuing SDS: Global Marketing Department Date of preparation / last revision 02/28/2017 / -

Date of preparation / last revision 02/28/2017 / Abbreviations and acronyms:
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
DOT: US Department of Transportation
IATA: International Air Transportation
EINECS: European Inventory of Existing Commercial Chemical Substances
EINECS: European Inventory of Existing Commercial Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
HMIS: Hazardous Materials Identification System (USA)
WHMIS: Workplace Hazardous Materials Information System (Canada)
LC50: Lethal concentration, 50 percent
UD50: Lethal dose, 50 percent
VPUB: very Persistent and very Bioaccumulative
ACGIH: American Conference of Governmental Industrial Hygienists (USA)
OSHA: Occupational Safety and Health Administration (USA)
NTP: National Toxicology Program (USA)
IARC: International Agency for Research on Cancer
EPA: Environmental Protection Agency (USA)
IFiammable liquids, Hazard Category 4
Acute Tox. 3: Acute Tox. 5: Acute Tox. 3: Acute Tox. 4: Acute Tox. 3: Acute Tox. 4: Acute Tox. 4: