N-(3-AminopropyI)-Ndodecylpropane-1,3-diamine



SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name

N-(3-Aminopropyl)-N-dodecylpropane-1,3-diamine

CAS number

2372-82-9

EC number

219-145-8

<u>Synonyms</u>

3-Aminopropyl-Dodecylpropan-Diamin

1.2. Relevant identified uses of the substance or mixture and uses advised against **Relevant identified uses** Research and development.

Not suitable for use in Not suitable for human consumption or veterinary purposes.

1.3. Details of the supplier of the safety data sheet

Supplier Molekula Group

Street address Molekula Ltd, Lingfield Way, Darlington, DL1 4XX Darlington United Kingdom

Telephone +44 (0) 3302 000 333

Email info@molekula.com

Web site www.molekula.com

Contact person **Kevin Banks**

Email address +44 (0) 7769276927

1.4. Emergency telephone number

Poison center/Additional emergency number 0344 892 0111 - National Poisons Information Service (Newcastle Centre)

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Classification

Serious eye damage, hazard category 1 Hazardous to the aquatic environment — Acute hazard category 1 Hazardous to the aquatic environment — Chronic hazard category 1 Skin corrosion, hazard category 1C Specific Target Organ Toxicity — Repeated exposure, hazard category 2 Acute toxicity, oral, hazard category 3

Hazard statements

H301, H314, H318, H373, H400, H410

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

Hazard pictograms



<u>Signal word</u> Danger

Hazard statements

H301 Toxic if swallowed.

H314 Causes severe skin burns and eye damage.

H373 May cause damage to organs through prolonged or repeated exposure

H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements

P260 Do not breathe dust.

P264 Wash skin thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P363 Wash contaminated clothing before reuse.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

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

P304 + P340 IF INHALED: Remove person to fresh air and keep 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.

P405 Store locked up.

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	CAS No. EC No. REACH No. Index No.	Concentration	Classification	H-phrase M factor acute M factor chronic	Note
N-(3-Aminopropyl)-N-dodecyl- propane-1,3-diamine	2372-82-9 219-145-8 - -	100%	Acute Tox. 3 - oral, Skin Corr. 1C, Eye Dam. 1, STOT RE 2, Aquatic Acute 1, Aquatic Chronic 1	H301, H314, H318, H373, H400, H410 - -	-

Molecular weight

299.54

Substance additional information

For the complete text of H- / EUH-statements mentioned in this section, see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

IF exposed or concerned: Get medical advice/attention. First aiders/ medical personnel need to protect themselves. Show this Safety Data Sheet (SDS) to medical personnel.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor. If breathing stops, provide artificial respiration. For breathing difficulties oxygen may be necessary.

Skin contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. Immediately call a POISON CENTER/doctor.

Eye contact

Remove contact lenses if present. Rinse eyes with water. Continue to rinse for at least 15 minutes and seek medical attention.

Ingestion

IF SWALLOWED: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only if the persons are fully conscious and awake).

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



Information for doctors No data available.

4.2. Most important symptoms and effects, both acute and delayed

The severity of the symptoms described will vary dependant of the concentration and the length of exposure. Causes burns by all exposure routes. See section 11 for more detailed information on health effects and symptoms.

Inhalation

Single exposure may cause the following adverse effects: Causes severe burns. Difficulty in breathing. Unconsciousness, possibly death.

Skin contact

Single exposure may cause the following adverse effects: Causes severe burns. Blistering may occur. May be absorbed in the body and cause dizziness, nausea and vomiting. Unconsciousness, death.

Eye contact

Single exposure may cause the following adverse effects: Causes serious eye damage. Unconsciousness, possibly death.

Ingestion

Single exposure may cause the following adverse effects: Severe abdominal pain. May cause severe internal injury. Unconsciousness, possibly death.

4.3. Indication of any immediate medical attention and special treatment needed Treat symptomatically. Immediately call a POISON CENTER/doctor.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.

Unsuitable extinguishing media

No specific fire fighting procedure given.

5.2. Special hazards arising from the substance or mixture

Specific hazards: Corrosive. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours. Carbon monoxide (CO). Carbon dioxide (CO2). Nitrous gases (NOx). Hydrogen bromide gas

5.3. Advice for firefighters

Special protective equipment for fire-fighters

Evacuate area. Avoid breathing gas, fume, vapours or spray. Prevent skin contact by maintaining a safe distance and by wearing suitable protective equipment/ clothing. Cool containers exposed to heat with water spray and remove container, if no risk is involved.

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Do not breathe vapour/spray. Avoid contact with skin and eyes. For personal protection, see section 8.

In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion.

6.2. Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

6.3. Methods and material for containment and cleaning up Collect with absorbent, non-combustible material into suitable containers.

6.4. Reference to other sections

For personal protection, see section 8. For waste disposal, see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Preventive handling precautions

Avoid contact with skin and eyes. Avoid dust formation. Provide adequate ventilation. For precautions see section 2.2.

7.2. Conditions for safe storage, including any incompatibilities Store in a dry place. Store in a closed container. Recommended storage temperature: 2 to 8°C (35.6 to 46.4°F)

7.3. Specific end use(s)

No specific usage precautions noted.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

Eye / face protection Wear eye protection.

Hand protection

Wear protective gloves.

Always inspect gloves before use. If signs of wear and tear are noticed then the gloves should be replaced.

No specific hygiene procedures noted, but good personal hygiene practices are always advisable, especially when working with chemicals. Wash contaminated skin thoroughly after handling.

Other skin protection

Wash skin thoroughly after handling.



N-(3-AminopropyI)-Ndodecylpropane-1,3-diamine

Respiratory protection

Provide adequate ventilation. If ventilation is insufficient, suitable respiratory protection must be provided.

Environmental exposure controls

Avoid discharge into drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid

Colour White / off-white.

<u>Odour</u> No data available

Melting point / freezing point

No data available

Boiling point or initial boiling point and boiling range No data available

Flammability No data available

Lower and upper explosion limit No data available

Flash point 65 °C

Auto-ignition temperature No data available

Decomposition temperature No data available

pН No data available

Kinematic viscosity

No data available

Solubility No data available

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



<u>Partition coefficient n-octanol/water</u> No data available

Vapour pressure

No data available

Density and/or relative density

No data available

<u>Relative vapour density</u> No data available

Particle characteristics

No data available

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stable under the prescribed storage conditions.

10.3. Possibility of hazardous reactions No data available

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Extremes of temperatures. Protect from sunlight.

10.5. Incompatible materials

Strong oxidising agents.

10.6. Hazardous decomposition products

See section 5. Carbon monoxide (CO). Carbon dioxide (CO2).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008 <u>Serious eye damage/irritation</u> May cause skin irritation/eczema.

Aspiration hazard

Based on available data, the classification criteria are not met.

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



11.2. Information on other hazards No data available

SECTION 12: Ecological information

- 12.1. Toxicity No data available
- **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** No data available
- **12.6. Endocrine disrupting properties** No data available
- **12.7. Other adverse effects** No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods <u>Disposal considerations</u> Dispose of contents/container in accordance with local regulations.

SECTION 14: Transport information

- **14.1. UN number** 2735
- 14.2. UN proper shipping name <u>ADR / RID / ADN proper shipping name</u> AMINES, LIQUID, CORROSIVE, N.O.S.

<u>IMDG proper shipping name</u> AMINES, LIQUID, CORROSIVE, N.O.S.

IATA proper shipping name Amines, liquid, corrosive, n.o.s.

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



14.3. Transport hazard class(es) <u>Label</u> ADR/RID/ADN



IMDG



ΙΑΤΑ



ADR / RID Class

8

ADR / RID Classification code C7

ADR / RID hazard identification number 80

IMDG Class 8

<u>IATA Class</u> 8

<u>ADN Class</u> 8

ADN Class Code C7

14.4. Packing group

ADR / RID / ADN: III IMDG: III IATA: III

N-(3-Aminopropyl)-Ndodecylpropane-1,3-diamine



14.5. Environmental hazards <u>IMDG EmS</u> F-A, S-B

- **14.6. Special precautions for user** Tunnel restriction code: E Transport category: 3
- 14.7. Maritime transport in bulk according to IMO instruments IBC Instruction: IBC03

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU regulations</u>

This SDS is not mandated under REACH Regulation (EC) No 1907/2006 and is provided for information only.

National regulations

No data available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Phrase meaning

Eye Dam. 1 - Serious eye damage, hazard category 1 Aquatic Acute 1 - Hazardous to the aquatic environment — Acute hazard category 1 Aquatic Chronic 1 - Hazardous to the aquatic environment — Chronic hazard category 1 Skin Corr. 1C - Skin corrosion, hazard category 1C STOT RE 2 - Specific Target Organ Toxicity — Repeated exposure, hazard category 2 Acute Tox. 3 - oral - Acute toxicity, oral, hazard category 3 H301 Toxic if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H373 May cause damage to organs through prolonged or repeated exposure H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.