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

1.1 Product identifiers

Product name : \( N-[3-(\text{Dimethylamino})\text{propyl}]\text{methacrylamide} \)

Product Number : 409472
Brand : Aldrich
CAS-No. : 5205-93-6

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

Identified uses : Laboratory chemicals, Synthesis of substances

1.3 Details of the supplier of the safety data sheet

Company : Sigma-Aldrich Inc.
3050 SPRUCE ST
ST. LOUIS MO 63103
UNITED STATES

Telephone : +1 314 771-5765
Fax : +1 800 325-5052

1.4 Emergency telephone

Emergency Phone # : 800-424-9300 CHEMTREC (USA) +1-703-527-3887 CHEMTREC (International) 24 Hours/day; 7 Days/week

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin irritation (Category 2), H315
Serious eye damage (Category 1), H318
Skin sensitzation (Category 1), H317

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
The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada

Hazard statement(s)
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.

Precautionary statement(s)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P280 Wear protective gloves/ eye protection/ face protection.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
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/ doctor.
P321 Specific treatment (see supplemental first aid instructions on this label).
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 Take off contaminated clothing and wash before reuse.
P501 Dispose of contents/ container to an approved waste disposal plant.

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

SECTION 3: Composition/information on ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Component</th>
<th>Classification</th>
<th>Concentration</th>
</tr>
</thead>
<tbody>
<tr>
<td>N-[3-(Dimethylamino)propyl]methacrylamide</td>
<td>Skin Irrit. 2; Eye Dam. 1; Skin Sens. 1; H315, H318, H317</td>
<td>&lt;= 100 %</td>
</tr>
</tbody>
</table>

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

SECTION 4: First aid measures

4.1 Description of first-aid measures

General advice
Show this material safety data sheet to the doctor in attendance.

If inhaled
After inhalation: fresh air.
In case of skin contact
In case of skin contact: Take off immediately all contaminated clothing. Rinse skin with water/ shower. Consult a physician.

In case of eye contact
After eye contact: rinse out with plenty of water. Immediately call in ophthalmologist. Remove contact lenses.

If swallowed
After swallowing: immediately make victim drink water (two glasses at most). 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

SECTION 5: Firefighting measures

5.1 Extinguishing media

Unsuitable extinguishing media
For this substance/mixture no limitations of extinguishing agents are given.

5.2 Special hazards arising from the substance or mixture
Carbon oxides
Nitrogen oxides (NOx)
Vapors are heavier than air and may spread along floors. Forms explosive mixtures with air on intense heating.

5.3 Advice for firefighters
Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

5.4 Further information
Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Advice for non-emergency personnel: Do not breathe vapors, aerosols. Avoid substance contact. Ensure adequate ventilation. Evacuate the danger area, observe emergency procedures, consult an expert.
For personal protection see section 8.

6.2 Environmental precautions
Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up
Cover drains. Collect, bind, and pump off spills. Observe possible material restrictions (see sections 7 and 10). Take up with liquid-absorbent material (e.g. Chemizorb®). Dispose of properly. Clean up affected area.
6.4 Reference to other sections
For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling
For precautions see section 2.2.

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions
Tightly closed.

Storage class
Storage class (TRGS 510): 10: Combustible liquids

7.3 Specific end use(s)
Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Ingredients with workplace control parameters
Contains no substances with occupational exposure limit values.
Hazardous components without workplace control parameters

8.2 Exposure controls

Appropriate engineering controls
Immediately change contaminated clothing. Apply preventive skin protection. Wash hands and face after working with substance.

Personal protective equipment

Eye/face protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Tightly fitting safety goggles

Skin protection
required

Body Protection
protective clothing

Respiratory protection
Recommended Filter type: Filter type ABEK
The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented. required when vapours/aerosols are generated.
Our recommendations on filtering respiratory protection are based on the following standards: DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

**Control of environmental exposure**
Do not let product enter drains.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
</table>
| a) Appearance                                 | Form: viscous liquid  
Color: light yellow                                                        |
| b) Odor                                        | amine-like                                                            |
| c) Odor Threshold                              | No data available                                                     |
| d) pH                                          | No data available                                                     |
| e) Melting point/freezing point               | No data available                                                     |
| f) Initial boiling point and boiling range    | 134 °C 273 °F at 3 hPa - lit.                                          |
| g) Flash point                                 | 129 °C (264 °F) - closed cup                                           |
| h) Evaporation rate                            | No data available                                                     |
| i) Flammability (solid, gas)                  | No data available                                                     |
| j) Upper/lower flammability or explosive limits| No data available                                                     |
| k) Vapor pressure                              | 0.004 hPa at 20 °C (68 °F)                                            |
| l) Vapor density                               | No data available                                                     |
| m) Density                                     | 0.94 g/cm3 at 25 °C (77 °F) - lit.                                     |
| n) Water solubility                            | soluble                                                               |
| o) Partition coefficient: n-octanol/water     | log Pow: 0.5 at 24 °C (75 °F)                                          |
| p) Autoignition temperature                   | 240 °C (464 °F) at 1,006 hPa                                          |
| q) Decomposition temperature                  | No data available                                                     |
| 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

SECTION 10: Stability and reactivity

10.1 Reactivity
Forms explosive mixtures with air on intense heating.
A range from approx. 15 Kelvin below the flash point is to be rated as critical.

10.2 Chemical stability
The product is chemically stable under standard ambient conditions (room temperature).

10.3 Possibility of hazardous reactions
No data available

10.4 Conditions to avoid
Strong heating.

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
In the event of fire: see section 5

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity
LD50 Oral - Rat - male - 3,334 mg/kg
Inhalation: No data available
LD50 Dermal - Rabbit - male - 2,355 mg/kg

Skin corrosion/irritation
Skin - Rabbit
Result: Skin irritation - 24 h

Serious eye damage/eye irritation
Eyes - Rabbit
Result: Risk of serious damage to eyes. - 72 h

Respiratory or skin sensitization
- Mouse
Result: May cause sensitization by skin contact.
(OECD Test Guideline 429)

Germ cell mutagenicity
Test Type: Hamster
Test system: Lungs
Metabolic activation: with and without metabolic activation
Result: negative

Species: Mouse

Aldrich - 409472
Result: negative

**Carcinogenicity**

IARC: No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No ingredient 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 on OSHA’s list of regulated carcinogens.

**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

11.2 Additional Information

Repeated dose toxicity - Rat - male and female - NOAEL (No observed adverse effect level) - 200 mg/kg

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

**SECTION 12: Ecological information**

12.1 Toxicity

**Toxicity to fish**

static test LC50 - Oncorhynchus mykiss (rainbow trout) - 290 mg/l - 96 h (OECD Test Guideline 203)

**Toxicity to daphnia and other aquatic invertebrates**

Immobilization EC50 - Daphnia magna (Water flea) - 272 mg/l - 48 h (OECD Test Guideline 202)

**Toxicity to algae**

Growth inhibition EC50 - Desmodesmus subspicatus (green algae) - 94.2 mg/l - 72 h (OECD Test Guideline 201)

**Toxicity to bacteria**

EC50 - Pseudomonas putida - 2,100 mg/l - 16 h

**Toxicity to daphnia and other aquatic invertebrates(Chronic**

EC50 - Daphnia magna (Water flea) - 141 mg/l - 21 d (OECD Test Guideline 211)
**12.2 Persistence and degradability**

Biodegradability: aerobic - Exposure time 28 d  
Result: 74.7% - Readily biodegradable.  
(OECD Test Guideline 301C)

**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 Endocrine disrupting properties**

No data available

**12.7 Other adverse effects**

No data available

---

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

*Product*

Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

---

**SECTION 14: Transport information**

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**Further information**

Not classified as dangerous in the meaning of transport regulations.

---

**SECTION 15: Regulatory information**

**SARA 302 Components**

Aldrich - 409472
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**
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**
Acute Health Hazard

**Massachusetts Right To Know Components**
No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**
N-[3-(Dimethylamino)propyl]methacrylamide  
CAS-No. 5205-93-6  
Revision Date

**New Jersey Right To Know Components**
N-[3-(Dimethylamino)propyl]methacrylamide  
CAS-No. 5205-93-6  
Revision Date

**California Prop. 65 Components**
This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive defects.

---

**SECTION 16: Other information**

**Further information**
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Corporation and its Affiliates shall not be held liable for any damage resulting from handling or from contact with the above product. See www.sigma-aldrich.com and/or the reverse side of invoice or packing slip for additional terms and conditions of sale.

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