



# Safety Data Sheet

Version 7.0  
Revision Date: 28/08/2020

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **2-(Dimethylamino)ethyl methacrylate, deuterated**  
Product number: D15DMAEMA, D5DMAEMA  
Product use: For laboratory research purposes.  
Supplier / Manufacturer: Polymer Source, Inc.  
Address: 124 Avro street, Dorval (Montreal), Quebec H9P 2X8, Canada  
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## 2. HAZARDS IDENTIFICATION

GHS classification: Flammable liquids (Category 4)  
Acute toxicity, Oral (Category 4)  
Acute toxicity, Dermal (Category 4)  
Skin corrosion (Category 1B)  
Serious eye damage (Category 1)  
Skin sensitisation (Category 1)  
Reproductive toxicity (Category 2)  
Short-term (acute) aquatic hazard (Category 3)

GHS Label elements, including precautionary statements:

Pictogram:



Signal word:

Danger

Hazard statements: H227. Combustible liquid.  
H302 + H332. Harmful if swallowed or if inhaled.  
H314. Causes severe skin burns and eye damage.  
H317. May cause an allergic skin reaction.  
H361. Suspected of damaging fertility or the unborn child.  
H335. May cause respiratory irritation.  
H402. Harmful to aquatic life.

- Precautionary statements:
- P201. Obtain special instructions before use.
  - P202. Do not handle until all safety precautions have been read and understood.
  - P210. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
  - P261. Avoid breathing dust, fume, gas, mist, vapours, spray.
  - P264. Wash skin thoroughly after handling.
  - P270. Do not eat, drink or smoke when using this product.
  - P272. Contaminated work clothing should not be allowed out of the workplace.
  - P273. Avoid release to the environment.
  - P280. Wear protective gloves / protective clothing / eye protection / face protection.
  - P301 + P312 + P330. *IF SWALLOWED:*  
Call a Poison Center / doctor if you feel unwell. Rinse mouth.
  - 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.
  - P304 + P340 + P310. *IF INHALED:*  
Remove person to fresh air and keep comfortable for breathing. Immediately call a Poison Center / doctor.
  - P305 + P351 + P338 + P310. *IF IN EYES:*  
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a Poison Center / doctor.
  - P308 + P313. *IF exposed or concerned:*  
Get medical advice / attention.
  - P333 + P313. *If skin irritation or rash occurs:*  
Get medical advice / attention.
  - P362 + P364. Take off contaminated clothing and wash it before reuse.
  - P370 + P378. *In case of fire:*  
Use dry sand, dry chemical or alcohol-resistant foam to extinguish.
  - P403. Store in a well-ventilated place.
  - P405. Store locked up.
  - P501. Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS:

**Lachrymator**

### 3. COMPOSITION / INFORMATION ON INGREDIENTS

Formula:	2-(Dimethylamino)ethyl methacrylate-d <sub>15</sub> :	C <sub>8</sub> D <sub>15</sub> NO <sub>2</sub>
	2-(Dimethylamino)ethyl methacrylate-d <sub>5</sub> :	C <sub>8</sub> H <sub>10</sub> D <sub>5</sub> NO <sub>2</sub>
Synonyms:	Methacrylic acid 2-(dimethylamino)ethyl ester, deuterated	
CAS registry number:	2-(Dimethylamino)ethyl methacrylate-d <sub>15</sub> (labelled):	n/a
	2-(Dimethylamino)ethyl methacrylate (unlabeled):	2867-47-2

Component	Classification Concentration	Concentration
Deuterated 2-Dimethylaminoethyl methacrylate	Flam. Liq. 4; Acute Tox. 4; Skin Corr. 1B; Eye Dam. 1; Skin Sens. 1; Aquatic Acute 3; H227, H302, H312, H314, H318, H317, H402	≤ 100%  (weight percent)

### 4. 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.
If swallowed:	Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIRE-FIGHTING MEASURES

Conditions of flammability:	Flammable in the presence of a source of ignition when the temperature is above the flash point. Keep away from heat, sparks, open flame, hot surface. No smoking.	
Suitable extinguishing media:	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.	
Special protective equipment for firefighters:	Wear self-contained breathing apparatus for firefighting if necessary.	
Hazardous combustion products:	Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ).	
Explosion data:	Sensitivity to mechanical impact:	no data available
	Sensitivity to static discharge:	no data available

Further information:

Use water spray to cool unopened containers.

## 6. ACCIDENTAL RELEASE MEASURES

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Personal precautions:	Use personal protective equipment. 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.
Environmental precautions:	Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
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). Keep in suitable, closed containers for disposal.

## 7. HANDLING AND STORAGE

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Precautions for safe handling:	Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from sources of ignition – No smoking. Take measures to prevent the build up of electrostatic charge.
Conditions for safe storage:	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.  Recommended storage temperature 2–8 °C  Moisture sensitive. Light sensitive.  Storage class (TRGS 510): 6.1B: Non-combustible, acute toxic Cat. 1 and 2 / very toxic hazardous materials.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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Personal protective equipment:	
• Respiratory protection:	Where risk assessment shows air-purifying respirators are appropriate use a fullface respirator with multi-purpose combination (US) or type ABEK (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).
• Hand 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.
• Eye 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, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace
- Hygiene measures: Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.
- Appropriate engineering controls: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
- Control of environmental exposure: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance:	Form:	Liquid
	Colour:	no data available
Safety data:	pH:	no data available
	Melting point / Freezing point:	no data available
	Boling point:	no data available
	Flash point:	no data available
	Ignition temperature:	no data available
	Auto-ignition temperature:	no data available
	Lower explosion limit:	no data available
	Upper explosion limit:	no data available
	Vapour pressure:	no data available
	Density:	no data available
	Water solubility:	no data available
	Partition coefficient: n-octanol/water:	no data available
	Relative vapour density:	no data available
	Odour:	no data available
	Odour threshold:	no data available
	Evaporation rate:	no data available

## 10. STABILITY AND REACTIVITY

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Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions:	no data available
Conditions to avoid:	Heat, flames and sparks.

Materials to avoid:	Strong acids, Strong bases, Strong oxidizing agents, Strong reducing agents.
Hazardous decomposition products:	Hazardous decomposition products formed under fire conditions: Carbon oxides, Nitrogen oxides (NO <sub>x</sub> ).  Other decomposition products: no data available.
Radioactivity:	Stable isotope compound. Not radioactive.

## 11. TOXICOLOGICAL INFORMATION

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Acute toxicity:	Oral LD50:	Rat – 1,751 mg/kg *[2-(Dimethylamino)ethyl methacrylate]
	Inhalation LC50:	no data available
	Dermal LD50:	no data available
	Other information on acute toxicity:	no data available
Skin corrosion/irritation:	Skin – Rabbit	
	Result:	Causes burns. – 24 h. *[2-(Dimethylamino)ethyl methacrylate]
Serious eye damage/eye irritation.	Eyes – Rabbit	
	Result:	Corrosive – 2 h. *[2-(Dimethylamino)ethyl methacrylate]
Respiratory or skin sensitization:	Maximisation Test – Guinea pig	
	Result:	May cause sensitisation by skin contact. *[2-(Dimethylamino)ethyl methacrylate]
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.
Reproductive toxicity:	no data available	
Teratogenicity:	no data available	
Specific target organ toxicity:	Single exposure (GHS):	May cause respiratory irritation.
	Repeated exposure (GHS):	no data available
Aspiration hazard:	no data available	
Synergistic effects:	no data available	
Additional information:	RTECS:	OZ4200000
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.		

## 12. ECOLOGICAL INFORMATION

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Toxicity:	<p>Toxicity to fish: Semi-static test LC50 – <i>Oryzias latipes</i> – 19.1 mg/l – 96 h</p> <p>Toxicity to daphnia and other aquatic invertebrates: Immobilization EC50 – <i>Daphnia magna</i> (Water flea) – 33 mg/l – 48 h</p> <p>Toxicity to algae: Growth inhibition EC50 – <i>Scenedesmus capricornutum</i> (fresh water algae) – 69.7 mg/l – 72 h</p> <p>*[2-(Dimethylamino)ethyl methacrylate]</p>
Persistence and degradability:	<p>Biodegradability: Aerobic – Exposure time 28 d. Result: 95.3 % – Readily biodegradable. *[2-(Dimethylamino)ethyl methacrylate]</p>
Bioaccumulative potential:	no data available
Mobility in soil:	no data available
PBT and vPvB assessment:	PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
Other adverse effects:	<p>Harmful to aquatic life.</p> <p>An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.</p>

## 13. DISPOSAL CONSIDERATIONS

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Product:	This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company.
Contaminated packaging:	Dispose of as unused product.

## 14. TRANSPORT INFORMATION

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DOT (US):	<p>UN number: 2522 Class: 6.1 Packing group: II Proper shipping name: 2-Dimethylaminoethyl methacrylate (d<sub>15</sub>) Poison Inhalation Hazard: No</p>
IMDG:	<p>UN number: 2522 Class: 6.1 Packing group: II EMS-No: F-A, S-A Proper shipping name: 2-Dimethylaminoethyl methacrylate (d<sub>15</sub>)</p>
IATA:	<p>UN number: 2522 Class: 6.1 Packing group: II Proper shipping name: 2-Dimethylaminoethyl methacrylate (d<sub>15</sub>)</p>

## 15. REGULATORY INFORMATION

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This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations (HPR) and the SDS contains all the information required by the HPR.

## 16. OTHER INFORMATION

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Date of the latest revision: 28 August 2020

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. Polymer Source, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product. See [www.polymersource.ca](http://www.polymersource.ca) for additional terms and conditions of sale.