

Material Safety Data Sheet

2-(Dimethylamino)ethyl methacrylate, 99%, stabilized with 0.2% MEHQ

ACC# 97117

Section 1 - Chemical Product and Company Identification

MSDS Name: 2-(Dimethylamino)ethyl methacrylate, 99%, stabilized with 0.2% MEHQ

Catalog Numbers: AC215840010, AC215840050, AC215842500

Synonyms: DMAEMA.

Company Identification:

Acros Organics N.V.

One Reagent Lane

Fair Lawn, NJ 07410

For information in North America, call: 800-ACROS-01

For emergencies in the US, call CHEMTREC: 800-424-9300

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
2867-47-2	2-(Dimethylamino)ethyl methacrylate	99	220-688-8
150-76-5	4-Methoxyphenol	0.2	205-769-8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: clear, colorless to pale yellow liquid. Flash Point: 70 deg C.

Danger! May cause burns by all exposure routes. May be fatal if mist inhaled. Harmful if swallowed or absorbed through the skin.

Combustible liquid and vapor. Light sensitive. Reactive monomer. Store under refrigeration to preserve product quality. Product polymerizes gradually at room temperature; at elevated temperatures, polymerization may occur rapidly enough to generate heat and pressure.

Target Organs: Eyes, skin, mucous membranes.

Potential Health Effects

Eye: Causes eye burns. Lachrymator (substance which increases the flow of tears).

Skin: May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material. Causes severe skin irritation and possible burns.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation with nausea, vomiting and diarrhea.

Inhalation: Causes respiratory tract irritation. May be fatal if exposed to high concentrations.

Chronic: Chronic exposure may cause effects similar to those of acute exposure.

Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical aid immediately.

Skin: In case of contact, immediately flush skin with soap and plenty of water. Remove contaminated clothing and shoes. Get medical aid if symptoms occur. Wash clothing before reuse.

Ingestion: If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: POISON material. If inhaled, get medical aid immediately. Remove victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Vapors can travel to a source of ignition and flash back. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Use water spray to keep fire-exposed containers cool. Fire or excessive heat may result in violent rupture of the container due to bulk polymerization. Combustible liquid and vapor.

Extinguishing Media: Use water spray, dry chemical, carbon dioxide, or appropriate foam.

Flash Point: 70 deg C (158.00 deg F)

Autoignition Temperature: 255 deg C (491.00 deg F)

Explosion Limits, Lower: 1.20 vol %

Upper: .00 vol %

NFPA Rating: (estimated) Health: 3; Flammability: 2; Instability: 2

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Remove all sources of

ignition. Use a spark-proof tool. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Ground and bond containers when transferring material. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Use with adequate ventilation. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames. Keep away from heat and flame. Do not breathe vapor or mist. Pure vapor will be uninhibited and may polymerize in vents or other confined spaces.

Storage: Keep refrigerated. (Store below 4°C/39°F.)

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
2-(Dimethylamino)ethyl methacrylate	none listed	none listed	none listed
4-Methoxyphenol	5 mg/m3 TWA	5 mg/m3 TWA	none listed

OSHA Vacated PELs: 2-(Dimethylamino)ethyl methacrylate: No OSHA Vacated PELs are listed for this chemical. 4-Methoxyphenol: 5 mg/m3 TWA

Personal Protective Equipment

Eyes: Wear chemical splash goggles and face shield.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Liquid

Appearance: clear, colorless to pale yellow

Odor: amine-like

pH: Not available.

Vapor Pressure: 13.3 mbar @ 75 deg C

Vapor Density: 5.4 (air = 1)

Evaporation Rate: Not available.

Viscosity: 1.6 mPa.s 20 deg C

Boiling Point: 182 - 192 deg C

Freezing/Melting Point: -30 deg C

Decomposition Temperature: Not available.

Solubility: Soluble.

Specific Gravity/Density: 0.933 g/cm3 @ 25°C

Molecular Formula: C8H15NO2

Molecular Weight: 157.21

Section 10 - Stability and Reactivity

Chemical Stability: May polymerize on exposure to light. Stable only if stored and handled under recommended conditions. The stability of the product depends upon the availability of both dissolved oxygen and MEHQ inhibitor (CAS=150-76-5). The presence of oxygen is necessary for the MEHQ to function effectively. The product should never be stored under an inert gas atmosphere, but should always be stored under an atmosphere containing 5-21% oxygen by volume. This material is a monomer and may polymerize under certain conditions if the stabilizer is lost. Liquid stable in the presence of an inhibitor. Vapor may polymerize explosively.

Conditions to Avoid: Light, ignition sources, excess heat, loss of inhibitor, contamination.

Incompatibilities with Other Materials: Strong oxidizing agents, peroxides, heavy metals, polymerization catalysts.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: May occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 2867-47-2: OZ4200000

CAS# 150-76-5: SL7700000

LD50/LC50:

CAS# 2867-47-2:

Inhalation, mouse: LC50 = 1800 mg/m3/2H;

Inhalation, rat: LC50 = 620 mg/m3/4H;

Oral, rat: LD50 = 1751 mg/kg;

CAS# 150-76-5:

Draize test, rabbit, skin: 6 gm/12D (Intermittent) Mild;
Draize test, rabbit, skin: 10%;
Oral, rat: LD50 = 1600 mg/kg;

See toxicity data on similar chemical, 2-dimethylaminoethyl acrylate, CAS 2439-35-2. Inhalation LC50 rat: 0.972 mg/l/1H.

Carcinogenicity:

CAS# 2867-47-2: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 150-76-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information available.

Teratogenicity: No information available.

Reproductive Effects: No information available.

Mutagenicity: No information available.

Neurotoxicity: No information available.

Other Studies:

Section 12 - Ecological Information

No information available.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	2-DIMETHYLAMINOETHYL METHACRYLATE	2-DIMETHYLAMINOETHYL METHACRYLATE
Hazard Class:	6.1	6.1
UN Number:	UN2522	UN2522
Packing Group:	II	II

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 2867-47-2 is listed on the TSCA inventory.

CAS# 150-76-5 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

CAS# 150-76-5: Testing required by manufacturers, processors

Section 12b

CAS# 150-76-5: Section 4

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 2867-47-2: immediate, fire.

CAS # 150-76-5: immediate.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 2867-47-2 can be found on the following state right to know lists: New Jersey, Pennsylvania, Massachusetts.

CAS# 150-76-5 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Minnesota, Massachusetts.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations
European Labeling in Accordance with EC Directives

Hazard Symbols:

XN

Risk Phrases:

R 21/22 Harmful in contact with skin and if swallowed.

R 36/38 Irritating to eyes and skin.

R 43 May cause sensitization by skin contact.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 28A After contact with skin, wash immediately with plenty of water

WGK (Water Danger/Protection)

CAS# 2867-47-2: 1

CAS# 150-76-5: 1

Canada - DSL/NDSL

CAS# 2867-47-2 is listed on Canada's DSL List.

CAS# 150-76-5 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of B3, D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 2867-47-2 is listed on the Canadian Ingredient Disclosure List.

CAS# 150-76-5 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 9/02/1997

Revision #7 Date: 10/03/2005

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.