Material Safety Data Sheet

Glycidyl methacrylate, 97% (stabilized with 90-110 ppm MEHQ)

ACC# 08250

Section 1 - Chemical Product and Company Identification

MSDS Name: Glycidyl methacrylate, 97% (stabilized with 90-110 ppm MEHQ) Catalog Numbers: AC165890000, AC165890050, AC165891000, AC165895000

Synonyms: 2,3-Epoxypropyl methacrylate; 2,3-Epoxy-1-propanol methacrylate; 2,3-Epoxypropyl ester methacrylic acid; Glycidyl-alpha-

methyl acrylate.

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
106-91-2	Glycidyl methacrylate	97	203-441-9
150-76-5	4-Methoxyphenol	.01	205-769-8

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: colorless liquid. Flash Point: 76 deg C.

Caution! Causes eye and skin irritation and burns. Harmful if absorbed through the skin. Causes respiratory tract irritation. May cause allergic skin reaction. **Combustible liquid and vapor.** May be harmful if swallowed. Light sensitive. Keep refrigerated. (Store below

Target Organs: Eyes, skin.

Potential Health Effects

Eye: Causes eye irritation and burns.

Skin: Causes skin irritation. Harmful if absorbed through the skin. Causes skin burns. May cause skin sensitization, an allergic reaction, which becomes evident upon re-exposure to this material.

Ingestion: May be harmful if swallowed. **Inhalation:** Causes respiratory tract irritation.

Chronic: Laboratory experiments have resulted in mutagenic effects.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid imme diately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Do not induce vomiting. If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid immediately.

Inhalation: Remove from exposure and move to fresh air immediately. If breathing is difficult, give oxygen. Get medical aid. Do NOT use mouth-to-mouth resuscitation. If breathing has ceased apply artificial respiration using oxygen and a suitable mechanical device such as a bag and a mask.

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. 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. Combustible liquid. Vapors may be heavier than air. They can spread along the ground and collect in low or confined areas. Containers may explode when heated.

Extinguishing Media: In case of fire, use water, dry chemical, chemical foam, or alcohol-resistant foam. Use water spray to cool fire-exposed containers. Do NOT get water inside containers.

Flash Point: 76 deg C (168.80 deg F)

Autoignition Temperature: 389 deg C (732.20 deg F)

Explosion Limits, Lower: Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 2; Flammability: 2; Instability: 0

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. Clean up spills immediately, observing precautions in the Protective Equipment section. Remove all sources of ignition.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Use only in a well-ventilated area. Do not get in eyes, on skin, or on clothing. Empty containers retain product residue, (liquid and/or vapor), and can be dangerous. Keep container tightly closed. Do not ingest or inhale. Store protected from light. Do not pressurize, cut, weld, braze, solder, drill, grind, or expose empty containers to heat, sparks or open flames.

Storage: Keep away from heat, sparks, and flame. Keep away from sources of ignition. Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Keep refrigerated. (Store below 4°C/39°F.) Store protected from light. Store in mild steel, stainless steel, or aluminum.

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
Glycidyl methacrylate	none listed	none listed	none listed
4-Methoxyphenol	5 mg/m3 TWA	5 mg/m3 TWA	none listed

OSHA Vacated PELs: Glycidyl methacrylate: No OSHA Vacated PELs are listed for this chemical. 4-Methoxyphenol: 5 mg/m3 TWA **Personal Protective Equipment**

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear polyethylene gloves, apron, and/or clothing. 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: colorless Odor: None reported. pH: Not available.

Vapor Pressure: 13.3 mbar @ 20

Vapor Density: 4.90

Evaporation Rate:Not available. Viscosity: 2.5 mPas 20 deg C Boiling Point: 189 deg C @ 760mm Hg

Preezing/Melting Point: Not available.

Decomposition Temperature: Not available.

Solubility: miscible in almost all common organic so

Specific Gravity/Density:1.0700g/cm3

Molecular Formula:C7H10O3 Molecular Weight:142.15

Section 10 - Stability and Reactivity

Chemical Stability: 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.

Conditions to Avoid: Incompatible materials, light, ignition sources, excess heat, loss of inhibitor.

Incompatibilities with Other Materials: Strong oxidizing agents, strong acids, strong bases, peroxides.

Hazardous Decomposition Products: Carbon monoxide, carbon dioxide.

Hazardous Polymerization: May occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 106-91-2: OZ4375000 **CAS#** 150-76-5: SL7700000

LD50/LC50: CAS# 106-91-2:

Draize test, rabbit, eye: 100 uL Moderate; Draize test, rabbit, skin: 500 uL/24H Severe;

Inhalation, rat: LC50 = 45 ppm/4H; Oral, mouse: LD50 = 390 mg/kg; Oral, rat: LD50 = 500 mg/kg; Skin, rabbit: LD50 = 450 uL/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;

Carcinogenicity:

CAS# 106-91-2: 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: Mutation in microorganisms: Salmonella typhimurium = 33 ug/plate and Klebsiella pneumoniae = 200 umol/L.; Mutation test system: Escherichia coli = 300 umol/L.; Cytogenetic analysis: Intraperitoneal, rat = 300 mg/kg.; Sister chromatid exchange: hamster lung

= 78 umol/L

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:	TOXIC LIQUIDS, ORGANIC, N.O.S.	No information available.	
Hazard Class:	6.1		
UN Number:	UN2810		
Packing Group:	III		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 106-91-2 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

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 # 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 depletors.

This material does not contain any Class 2 Ozone depletors.

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# 106-91-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

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 20/21/22 Harmful by inhalation, 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 $\overset{'}{2}$ 6 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# 106-91-2: 2 CAS# 150-76-5: 1

Canada - DSL/NDSL

CAS# 106-91-2 is listed on Canada's DSL List. CAS# 150-76-5 is listed on Canada's DSL List.

Canada - WHMIS

not available.

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# 106-91-2 is not listed on the Canadian Ingredient Disclosure List. CAS# 150-76-5 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information

MSDS Creation Date: 2/04/1999 **Revision #5 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.