

SAFETY DATA SHEET
METHYL METHACRYLATE MONOMER, STABILIZED
QUICKMOUNT LIQUID



Section 1. Product and Company Identification

Product Identifier

CAS Number: 80-62-6

CAS Name: 2-METHY-2-PROPENOIC ACID, METHYL ESTER

Trade Names and Synonyms

METHYL METHACRYLATE MONOMER

MMA

2-METHYL-2-PROPENOIC ACID, METHYL ESTER

METHYL 2-METHYL-2-PROPENOATE

METHACRYLIC ACID, METHYL ESTER

M100

Manufacturer's Name:

Fulton Metallurgical Products Corporation

PO Box 427

Saxonburg, PA 16056

Telephone Number for Information:

1-724-898-3600

Emergency Telephone Number:

1-800-424-9300 (CHEMTREC)

Section 2. Hazard(s) Identification

Potential Acute Health Effects:

EYE: Liquid and vapors can cause moderate irritation (tears, blurred vision and redness).

SKIN: May cause skin irritation. Can cause skin sensitization.

INGESTION: Causes irritation, a burning sensation of the mouth, throat and gastrointestinal tract and abdominal pain.

Potential Chronic Health Effects

CHRONIC: (Cancer) INFORMATION: Prolong and/or repeated exposure may lead to kidney, lungs, heart and liver damage. Unlikely to present a cancer hazard to man.

TERATOLOGY (BIRTH DEFECT) INFORMATION: Developmental toxicity observed in animal tests but only at levels toxic to the mother.

REPRODUCTIVE INFORMATION: No information available but no adverse reproductive effect expected.

Section 3. Composition/Information on Ingredients

| Hazardous Components | CAS No. | OSHA PEL | % |
|-------------------------------------|-----------|----------|-------|
| Methyl Methacrylate Monomer | 80-62-6 | 100 | 90-95 |
| N, N- Dimethyl-P-Toluidine | 99-97-8 | N/A | 1-2 |
| 1, 3 Butylene Glycol Dimethacrylate | 1189-08-8 | N/A | 4-8 |

Section 4. First Aid Measures

Eye Contact: Check for and remove any contact lenses. Immediately flush eye with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact: After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention. Wash contaminated clothing before reusing. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention.

Inhalation: If inhaled, move individual to fresh air. If breathing is difficult, give oxygen. Seek medical attention. If not breathing, call for medical assistance and perform cardiopulmonary resuscitation.

Ingestion: Do not induce vomiting. Loosen tight clothing such as collar, tie, belt or waistband. If the victim is not breathing, perform cardiopulmonary resuscitation.

Section 5. Fire Fighting Measures

Flash Point (Method Used)

55 TOC; 50 TCC

Flammable Limits

LEL 2.12

UEL 12.5

Extinguishing Media: Foam, CO₂, Dry Chemical, Water Fog (by trained personnel).

Special Fire Fighting Procedures:

Water may be ineffective unless used as a fine mist spray of fog.

Use water spray to cool fire

Fire and Explosive Hazard: Sealed containers exposed to elevated temperatures may rupture explosively due to polymerization. Vapors may travel to source of ignition and flash back. Avoid ignition sources of excessive temperatures. Closed containers can rupture explosively.

Fire Fighting Instructions: Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. Fire fight from a distance, heat may rupture containers.

Section 6. Accidental Release Measures

Small Spill: Dilute with water and mop up, or absorb with an inert dry material and place in an appropriate waste disposal container.

Large Spill: Flammable liquid. Keep away from heat. Keep away from sources of ignition. Eliminate all ignition sources. Stop leak if without risk. Absorb with DRY earth, sand or other non-combustible material. Do not touch spilled material. Prevent entry into sewers, basements, or confined areas; dike if needed. Be careful that the product is not present at a concentration level above TLV.

Section 7. Handling and Storage

Precautions: Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe fumes/vapors/spray. Wear suitable protective clothing in case of insufficient ventilation, wear suitable respiratory equipment, if ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as metals, acids, and alkalis.

Storage: Flammable materials should be stored in a separate safety storage cabinet or room. Keep away from heat. Keep away from sources of ignition. Keep container tightly closed. Keep in a cool, well-ventilated place.

A refrigerated room would be preferable for materials with a flash point lower than 37.8 degrees C (100 degrees F). Do not expose to direct sunlight.

Storage Precaution: Advisable to use material within six (6) months.

Disposal Method: Under controlled conditions in a safe open area, or landfill according to Federal, State, or Local regulations. Biological degradation is also possible.

Section 8. Exposure Controls/Personal Protection

Engineering Controls:

Keep container tightly closed.

Mechanical ventilation to keep vapors concentration below exposure limits.

Personal Protective Equipment:

Eye/Face Protection: Wear safety glasses. Wear splash proof goggles (ANSI A87.1-1968) and face shield when possibility exists for eye and face contact due to splashing or spraying material.

Respirators: A NIOSH approved air purifying respirator with an organic vapor cartridge or canister may be permissible under certain limited circumstances where airborne concentrations are expected to exceed exposure limits. Protection provided by air purifying respirators is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where air purifying respirators may not provide adequate protection.

Protective Clothing: Wear impervious apron and gloves to prevent ANY contact with this product. Wear apron, gloves, and overshoes during clean-up operations. Nitrile is better than PVC.

Hygienic Practices: Regular laboratory procedures- housekeeping.

Exposure Limits:

METHYL METHACRYLATE

PEL (OSHA): 100 ppm, 8 Hr. TWA

TLV (ACGIH): 50 ppm, 8 Hr. TWA; 100 ppm, 15 min. STEL

Section 9. Physical and Chemical Properties

| | |
|---------------------------------------|---------------------------------|
| Physical state and appearance: | Liquid |
| Color: | Clear, colorless |
| Odor: | Characteristic acrylic odor |
| Oder Threshold: | 0.049 ppm |
| Taste: | Not available |
| Molecular Weight: | 100.2g/mole |
| pH (1% soln/water): | Not available |
| Boiling Point: | 101C; 214 F |
| Melting Point: | -48C |
| Critical Temperature: | Not available |
| Specific Gravity: | 0.936 (Water = 1) |
| Vapor Pressure: | 29 mm Hg @ 20C |
| Vapor Density: (Air = 1): | 3.45 |
| Volatility: | Not available |
| Water/Oil Dist. Coeff: | Not available |
| Solubility (in Water): | Partially soluble in cold water |
| Ionicity (in Water): | Not available |

Section 10 – Stability and Reactivity

Stability: This product is stable.

Conditions to Avoid: Elevated temperatures and ignition sources.

Incompatibility (Materials to Avoid): Reducing & oxidizing materials. Material is a strong solvent and can soften paints and rubber.

Hazardous Decomposition or Byproducts: Acid fumes and CO and/or CO₂.

Hazard Polymerization: May occur

Section 11 – Toxicological Information

Primary Routes of Entry: Eyes, Inhalation, Skin, & Ingestion

Health Hazards: Acute and Chronic): Prolong or repeated overexposure could cause liver and kidney damage. Can aggravate pre-existing respiratory condition(s).

Signs and Symptoms of Exposure: Vapors concentration can cause headache, nausea, smarting of eyes and irritation of respiratory system. Liquid contact with eyes will cause irritation and possible cornea damage.

Emergency and First Procedure

Inhalation: Move subject to fresh air immediately. Give oxygen or perform cardiopulmonary resuscitation if needed.

Skin and Eyes: Wash skin with soap and water. Check eyes for and remove any contact lenses. Immediately flush eye with copious amounts of running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do use an eye ointment. Seek medical attention.

Ingestion: Do not induce vomiting and seek medical attention promptly.

Toxicity to Animals: WARNING: THE LC₅₀ VALUES HEREUNDER ARE ESTIMATED ON THE BASIS OF A 4-HOUR EXPOSURE. Acute oral toxicity (LD₅₀): 7872 mg/kg [Rat]. Acute toxicity of the vapor (LC₅₀): 5303.3 ppm; 4 hour(s) [Rat].

Section 12 – Impact on the Environment

Ecotoxicity: Not available

BOD₅ and COD: Not available

Products of Biodegradation: Possible hazardous short-term degradation products are not likely. However, long-term degradation products may arise.

Toxicity of the Products of

Biodegradation: The products of degradation are more toxic.

Special Remarks on the

Products of Biodegradation: Not available

Section 13 – Disposal Consideration

Waste Disposal: Waster must be disposed of in accordance with federal, state, and local environmental control regulations.

Section 14 – Transport Information

DOT Classification: Class 3: Flammable liquid
Identification: Methyl Methacrylate Monomer, Stabilized: UN1247
Packing Group II
Special Provisions for Transport: Not available



Section 15 – Regulatory Information

Federal and State Regulations: Pennsylvania RTK: Methyl Methacrylate

Other Regulations: Occupational Safety and Health Administration (OSHA): Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).

Other Classifications:

WHMIS (Canada): Class B-2: Flammable liquid with a flash point lower than 37.8°C (100°F).
Class D-2A: Material causing other toxic effects.

DSCL (EEC): R11 – Highly flammable, R37/38-Irritating to eyes and skin.

HMIS (USA): Health Hazard: 2
Fire Hazard: 3
Reactivity: 3
Personal Protection: h

National Fire

Protection Association (USA) Health Hazard: 2
Flammability: 3
Reactivity: 2

Protective Equipment: Suitable gloves, Lab coat, Respirator (Be sure to use a NIOSH approved/certified respirator. Wear appropriate respirator when ventilation is inadequate), Safety Glasses and/or Splash Goggles.

Section 16 – Other Information

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