

SAFETY DATA SHEET

SECTION 1) CHEMICAL PRODUCT AND SUPPLIER'S IDENTIFICATION

CAS Number: 96-33-3
Product Name: Methyl Acrylate, Inhibited
Revision Date: Mar 21, 2018 **Date Printed:** Mar 21, 2018
Version: 1.0 **Supersedes Date:** N.A.
Manufacturer's Name: Thames River Chemical Corp.
Address: 5230 Harvester Road Burlington, ON, CA, L7L 4X4
Emergency Phone: CHEMTREC (800) 424-9300
Information Phone Number: 905-681-5353
Fax: 905-681-5377
Product/Recommended Uses: For laboratory or industrial use only.

SECTION 2) HAZARDS IDENTIFICATION

Classification

Acute aquatic toxicity - Category 2
Acute toxicity Dermal - Category 4
Acute toxicity Inhalation - Category 4
Acute toxicity Oral - Category 3
Chronic aquatic toxicity - Category 3
Eye Irritation - Category 2A
Flammable Liquids - Category 2
Skin Irritation - Category 2
Skin Sensitizer - Category 1
Specific Target Organ Toxicity -Single Exposure (Respiratory Tract Irritation) - Category 3

Pictograms



Signal Word

Danger

Hazard Statements - Health

Harmful in contact with skin
Harmful if inhaled
Toxic if swallowed
Causes serious eye irritation
Causes skin irritation
May cause an allergic skin reaction
May cause respiratory irritation

Hazard Statements - Physical

Highly flammable liquid and vapor

Hazard Statements - Environmental

Toxic to aquatic life

Harmful to aquatic life with long lasting effects

Precautionary Statements - General

If medical advice is needed, have product container or label at hand.

Keep out of reach of children.

Read label before use.

Precautionary Statements - Prevention

Avoid release to the environment.

Wear protective gloves/protective clothing/eye protection/face protection.

Avoid breathing dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

Wash thoroughly/Wash hands thoroughly after handling.

Do not eat, drink or smoke when using this product.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground/bond container and receiving equipment.

Use explosion-proof electrical, ventilating, lighting equipment.

Use only non-sparking tools.

Take action to prevent static discharges.

Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements - Response

IF ON SKIN: Wash with plenty of water and soap.

Call a POISON CENTER or doctor, if you feel unwell.

Specific treatment (see first-aid on the SDS).

Take off contaminated clothing. And wash it before reuse.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

IF SWALLOWED: Immediately call a POISON CENTER or doctor.

Rinse mouth.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

In case of fire: Use carbon dioxide, alcohol foam, water spray or dry chemical to extinguish.

If skin irritation occurs: Get medical advice/attention.

If skin irritation or a rash occurs: Get medical advice/attention.

Precautionary Statements - Storage

Store locked up.

Store in a well-ventilated place. Keep cool.

Store in a well-ventilated place. Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container in accordance with local/national/international regulation. Waste management should be in full compliance with national, regional and local laws.

Physical Hazards Not Otherwise Classified

No Data Available

Health Hazards Not Otherwise Classified

No Data Available

SECTION 3) COMPOSITION/INFORMATION ON INGREDIENTS

Composition Information

Monomethyl Ether of Hydroquinone (MEHQ); CAS Number: 150-76-5; % by Weight Range: 10-100ppm

CAS	Chemical Name	% By Weight
0000096-33-3	METHYL ACRYLATE	99.5% - 100.0%

Specific chemical identity and/or exact percentage (concentration) of the composition has been withheld to protect confidentiality.

SECTION 4) FIRST-AID MEASURES

Inhalation

Remove from exposure to fresh air, restore breathing use oxygen if needed. Keep warm and quiet. Immediately notify a physician.

Eye Contact

Immediately flush eyes with water for 15 minutes. Hold eyelids open for complete irrigation. Remove contact lenses, if worn, after initial flushing. Immediately take to a physician.

Skin Contact

Take off immediately all contaminated clothing, shoes and leather goods (e.g. watchbands, belts). Store contaminated clothing under water and wash before re-use or discard. Rinse skin with water/shower and mild soap for 5 minutes or until product is removed.

Ingestion

Patient should be made to drink large amounts of water. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician or poison control center, treat symptomatically.

Most Important Symptoms and Effects, Both Acute and Delayed

No Data Available

Indication of Any Immediate Medical Attention and Special Treatment Needed

No Data Available

SECTION 5) FIRE-FIGHTING MEASURES

Suitable Extinguishing Media

Small Fire : Dry chemical, foam, carbon dioxide, water-spray or alcohol-resistant foam. Carbon dioxide can displace oxygen. Use caution when applying carbon dioxide in confined spaces. Large Fire: Water spray, fog or alcohol-resistant foam.

Unsuitable Extinguishing Media

Do not use straight stream of water.

Specific Hazards in Case of Fire

Fire and explosion hazard: dangerous fire hazard when exposed to heat or flame. Vapors are heavier than air and may travel a considerable distance to a source of ignition and flash back. Vapor-air mixtures are explosive.

Flash Point: 27°F TCC
Auto-ignition Point: 779°F
LEL %:2.1
UEL %:14.5

Fire-fighting Procedures

Isolate immediate hazard area and keep unauthorized personnel out. Move undamaged containers from immediate hazard area if it can be done safely. Stop spill/release if it can be done safely. Cool containers with flooding quantities of water until well after fire is out. Caution should be exercised when using water or foam as frothing may occur, especially if sprayed into containers of hot, burning liquid. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations. Product has a low flashpoint: Use of water spray when fighting fire may be inefficient. Nitromethane and nitroethane: Do not use dry chemical extinguishers to control fires. Large Fire: Dike fire-control water for later disposal; do not scatter the material

Special Protective Actions

Keep containers tightly closed. Flammable liquid; isolate from all sources of ignition. Closed containers may explode when exposed to extreme heat. Vapors are heavier than air and can travel considerable distance to a source of ignition and flashback. Rapid uncontrolled polymerization can cause explosion. Containers that rupture explosively, due to polymerization, may auto-ignite.

SECTION 6) ACCIDENTAL RELEASE MEASURES

Emergency Procedure

Isolate hazard area and keep unauthorized personnel away. Stay uphill and/or upstream. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ventilate closed spaces before entering. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). All equipment used when handling the product must be grounded. Evacuate and isolate hazard area and keep unauthorized personnel away. A vapor-suppressing foam may be used to reduce vapors.

Recommended Equipment

Wear chemical protective clothing and positive pressure self-contained breathing apparatus (SCBA).

Personal Precautions

Flammable Liquid; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

Environmental Precautions

Stop spill/release if it can be done safely. Prevent spilled material from entering sewers, storm drains, other unauthorized drainage systems and natural waterways by using sand, earth, or other appropriate barriers. Dike far ahead of liquid spill for later disposal.

Methods and Materials for Containment and Cleaning up

Use explosion proof equipment. Shut off valves, contain spill, keep out of water sources and sewers, for smaller spills add non-flammable absorbent such as clay or silica in spill area. If an odor or acidity problem exists, add lime or sodium bicarbonate. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Remove contaminated soil to remove contaminated trace residues. Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace residue. Minimize breathing vapors and skin contact, ventilate confined areas, open all indows and doors, assure conformity with applicable government regulations. eep all nonessential people away. Caution: Spontaneous polymerization can occur if material is released or mixed with incompatibles.

SECTION 7) HANDLING AND STORAGE

General

PERSONAL PRECAUTIONARY MEASURES

This material presents a fire hazard. Invisible vapor spreads easily and can be set on fire by many sources, such as pilot lights, welding equipment, and electrical motors and switches. Vapor is heavier than air and can travel considerable distance to a source of ignition and lash back. Avoid breathing vapors in top of shipping container. Use with adequate ventilation. Avoid prolonged or repeated contact with eyes, skin and clothing. Do not take internally.

HANDLING INFORMATION

Maintain contact with atmosphere of 5-21% oxygen. Do not use inert atmosphere as blanket. Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close container.

STATIC HAZARD

Electrostatic charge may accumulate and create a hazardous condition when handling this material. To minimize this hazard, bonding and grounding may be necessary but may not be sufficient. For more information refer to OSHA Standard 29CFR 1910.106 "Flammable and Combustible Liquids" and National Fire Protection Association (NFPA 77) "Recommended Practice on Static Electricity".

Ventilation Requirements

Use only with adequate ventilation to control air contaminants to their exposure limits. Report ventilation failures immediately. The use of local ventilation is recommended to control emissions near the source.

Storage Room Requirements

CONDITIONS FOR SAFE STORAGE

Store in closed containers away from direct sunlight. Do not store above 100°F. Store large quantities only in buildings designed to comply with OSHA 1910.106.

Avoid storage under an oxygen free atmosphere. An air space is required above the liquid in all containers. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use.

CONTAINER WARNINGS

Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum reconditioner.

Empty container retain residue and may be dangerous. Keep away from incompatible materials (e.g. oxidizers). Never use plastic or glass containers for storing flammable liquids. Cabinets must be labelled; FLAMMABLE - KEEP FIRE AWAY. Avoid storing in basements. Protect containers against banging or other physical damage when storing, transferring, or using them.

SECTION 8) EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye protection

Wear indirect-vent, impact and splash resistant goggles when working with liquids

Skin Protection

Use of gloves approved to relevant standards made from the following materials may provide suitable chemical protection: PVC, neoprene or nitrile rubber gloves. Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material, glove thickness, dexterity. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. Always seek advice from glove suppliers. Contaminated gloves should be replaced. Use an apron and over-boots of chemically impervious materials such as neoprene or nitrile rubber.

Respiratory Protection

If engineering controls do not maintain airborne concentrations to a level which is adequate to protect worker, a respiratory protection program that meets or is equivalent to OSHA 29 CFR 1910.134 should be followed. Check with respiratory protective equipment suppliers.

Appropriate Engineering Controls

Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.

Chemical Name	CANsmg	CANppm	CANtmg	CANtppm	OSHA STEL (mg/m3)	OSHA STEL (ppm)	OSHA TWA (mg/m3)	OSHA TWA (ppm)	OSHA Carcinogen	OSHA Tables (Z1, Z2, Z3)	OSHA Skin designation	ACGIH STEL (mg/m3)
METHYL ACRYLATE	70	20	35	10			35	10	1	1	1	

Chemical Name	ACGIH STEL (ppm)	ACGIH TWA (mg/m3)	ACGIH TWA (ppm)	ACGIH TLV Basis	ACGIH Carcinogen	ACGIH Notations
METHYL ACRYLATE	1000	7	2	Eye, skin & URT irr; eye dam	A4	Skin; DSEN; A4

A4 - Not Classifiable as a Human Carcinogen, dam - Damage, DSEN - Dermal sensitization, irr - Irritation, URT - Upper respiratory tract

SECTION 9) PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties

Density	7.98 lb/gal
Specific Gravity	0.96
Appearance	clear, colorless liquid
Odor Description	pungent odor
Odor Threshold	14 ppb/no unit specified
pH	none
Melting/Freezing Point	-75 °C
Low Boiling Point	175 °C
High Boiling Point	N/A
Flash Point	-3 °C
Vapor Pressure	68 mmHg
Vapor Density	2.97 (air=1)
Evaporation Rate	< 3.5
Upper Explosion Level	14.5%
Lower Explosion Level	2.1%
Water Solubility	6%

Coefficient Water/Oil
Viscosity

log Pow = 0.74
0.53 centipoise (20°C)

SECTION 10) STABILITY AND REACTIVITY

Reactivity

Vapors may form explosive mixtures with air.

Stability

Stable under normal storage and handling conditions. Must be equilibrated with an atmosphere containing 5-8% (by volume) oxygen for inhibitor to function.

Conditions to Avoid

Heat, Sparks, Pilot Lights, Static Electricity, and Open Flame.

Hazardous Reactions/Polymerization

Uncontrolled polymerization can cause rapid evolution of heat and increased pressure which can result in violent rupture of storage vessels or containers.

Incompatible Materials

Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. hydrochloric acid hydrogen peroxide, aldehydes, ethers and azides.

Hazardous Decomposition Products

Hazardous polymerization may occur. Fumes, Smoke, Carbon Monoxide and other decomposition products where combustion is not complete.

SECTION 11) TOXICOLOGICAL INFORMATION

Likely Route of Exposure

Inhalation, ingestion, skin absorption

Acute Toxicity

Harmful in contact with skin

Harmful if inhaled

Toxic if swallowed

Aspiration Hazard

No Data Available

Carcinogenicity

No Data Available

Germ Cell Mutagenicity

No Data Available

Reproductive Toxicity

No Data Available

Respiratory/Skin Sensitization

May cause an allergic skin reaction

Serious Eye Damage/Irritation

Causes serious eye irritation

Skin Corrosion/Irritation

Causes skin irritation

Specific Target Organ Toxicity - Repeated Exposure

No Data Available

Specific Target Organ Toxicity - Single Exposure

May cause respiratory irritation

0000096-33-3 METHYL ACRYLATE

LD50 (oral, rat): 300 mg/kg (4)
LD50 (oral, rabbit): 280 mg/kg (4)
LD50 (dermal, rabbit): 1300 mg/kg (4)

SECTION 12) ECOLOGICAL INFORMATION

Toxicity

Toxic to aquatic life

Harmful to aquatic life with long lasting effects

AQUATIC TOXICITY: Methyl Acrylate exhibits moderate acute toxicity to fish.

LC50 96-hour Fish (Trout) 3.4ppm

LC50 96-hour Fish (Sheepshead Minnow) 1.1ppm

LC50 96-hour Fish (Goldfish) 5ppm

EC50 48-hour Water Flea (Daphnid) 2.6ppm

LC50 96-hour Algae 7ppm

Mobility in Soil

No Data Available

Bio-accumulative Potential

The log n-octanol/water partition coefficient for methyl acrylate is 0.74. This suggests a low potential to bioaccumulate.

No Data Available

Persistence and Degradability

Result: 90 - 100 % - Readily biodegradable.

Methyl Acrylate was confirmed to be significantly degradable in the Japanese MITI biodegradability screening test. Atmospheric photochemical degradation (half-life) is estimated to be 14.5 hours. Volatization half-lives of 6.8hours and 3.2 days for river and pond, respectively.

No Data Available

Other Adverse Effects

No Data Available

SECTION 13) DISPOSAL CONSIDERATIONS

Waste Disposal

Empty Containers retain product residue which may exhibit hazards of material, therefore do not pressurize, cut, glaze, weld or use for any other purposes. It is the responsibility of the user of the product to determine at the time of disposal whether the product meets local criteria for hazardous waste. Waste management should be in full compliance with national, provincial and local laws.

SECTION 14) TRANSPORT INFORMATION

U.S. DOT Information

UN number: UN1919

Proper shipping name:

Hazard class: 3

Packaging group: II

Hazardous substance (RQ): No Data Available

Toxic-Inhalation Hazard: No Data Available

Marine Pollutant: No Data Available

Note / Special Provision: No Data Available

Transport Canada Information

UN number: UN1919

Proper shipping name: Methyl acrylate, stabilized

Hazard class: 3

Packaging group: II

Marine Pollutant: No Data Available

Transport in bulk (according to Annex II of MARPOL 73/78): No Data Available

Note / Special Provision: Note / Special Provision

SECTION 15) REGULATORY INFORMATION

CAS	Chemical Name	% By Weight	Regulation List
0000096-33-3	METHYL ACRYLATE	99.5% - 100.0%	DSL, TSCA, CA_Prop65 - California Proposition 65

SECTION 16) OTHER INFORMATION

Glossary

ACGIH- American Conference of Governmental Industrial Hygienists; ANSI- American National Standards Institute; Canadian TDG- Canadian Transportation of Dangerous Goods; CANsmg or CANspmm - Canadian Short Term Exposure Level in mg/L or in ppm; CANtmg or CANtppm - Canadian Time Weighted Average in mg/L or in ppm; CAS- Chemical Abstract Service; Chemtrec- Chemical Transportation Emergency Center(US); CHIP- Chemical Hazard Information and Packaging; DSL- Domestic Substances List; EC- Equivalent Concentration; EH40 (UK)- HSE Guidance Note EH40 Occupational Exposure Limits; EPCRA- Emergency Planning and Community Right-To-Know Act; ESL Effects screening levels; HMIS- Hazardous Material Information Service; LC- Lethal Concentration; LD- Lethal Dose; NFPA- National Fire Protection Association; OEL- Occupational Exposure Limits; OSHA- Occupational Safety and Health Administration, US Department of Labor; PEL- Permissible Exposure Limit; SARA (Title III)- Superfund Amendments and Reauthorization Act; SARA 313- Superfund Amendments and Reauthorization Act, Section 313; SCBA- Self Contained Breathing Apparatus; STEL-Short Term Exposure Limit; TCEQ Texas Commission on Environmental Quality; TLV- Threshold Limit Value; TSCA- Toxic Substances Control Act Public Law 94-469; TWA Time Weighted Value; US DOT- US Department of Transportation; WHMIS- Workplace Hazardous Materials Information System.

Version 1.0:

Revision Date: Mar 21, 2018

First Edition.

DISCLAIMER

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist. The above information pertains to this product as currently formulated, and is based on the information available at this time. Addition of reducers or other additives to this product may substantially alter the composition and hazards of the product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.