

SAFETY DATA SHEET

Preparation Date: 04/27/2015

Revision Date: 04/27/2015

Revision Number: G1

Product identifier

Product code: M1318
Product Name: METHYL ACRYLATE

Other means of identification

Synonyms: 2-Propenoic acid, methyl ester (9CI)
Acrylate de methyle (French)
Acrylic acid, methyl ester
Acrylsaeuuremethylester (German)
Curithane 103
Methoxycarbonylethylene
Methyl acrylate
Methyl acrylate (ACGIH:OSHA)
Methyl ester of acrylic acid
Methyl propenate
Methyl propenoate
Methyl-2-propenoate
Methyl-acrylat (German)
Methylacrylaat (Dutch)
Methylester kyseliny akrylove (Czech)
Metilacrilato (Italian)

CAS #: 96-33-3
RTECS # AT2800000
CI#: Not available

Recommended use of the chemical and restrictions on use

Recommended use: Production of acrylic and modacrylic fibers; resin; medical sciences.
Uses advised against No information available

Supplier: Spectrum Chemicals and Laboratory Products, Inc.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number Chemtrec 1-800-424-9300
Contact Person: Martin LaBenz (West Coast)
Contact Person: Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 4

Acute toxicity - Inhalation (Gases)	Category 3
Acute toxicity - Inhalation (Vapors)	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 4
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Skin sensitization	Category 1
Specific target organ toxicity (single exposure)	Category 3
Specific target organ toxicity (repeated exposure)	Category 2
Flammable liquids	Category 2

Label elements

Danger

Hazard statements

Toxic if swallowed
Harmful in contact with skin
Toxic if inhaled
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
May cause respiratory irritation
May cause damage to organs through prolonged or repeated exposure
Highly flammable liquid and vapor



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Toxic to aquatic life with long lasting effects
Toxic to aquatic life

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
 Do not eat, drink or smoke when using this product
 Use only outdoors or in a well-ventilated area
 Contaminated work clothing should not be allowed out of the workplace
 Do not breathe dust/fume/gas/mist/vapors/spray
 Keep away from heat/sparks/open flames/hot surfaces. — 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 precautionary measures against static discharge
 Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Specific treatment (see .? on this label)
 Specific measures (see .? on this label)
 Specific treatment (see .? on this label)
 Get medical advice/attention if you feel unwell
 In case of fire: Use CO2, dry chemical, or foam to extinguish.
 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.
 Call a POISON CENTER or doctor/physician if you feel unwell
 If skin irritation or rash occurs: Get medical advice/attention
 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower
 Wash contaminated clothing before reuse
 Call a POISON CENTER or doctor/physician. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
 IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
 Rinse mouth

Precautionary Statements - Storage

Store locked up
 Store in a well-ventilated place. Keep container tightly closed

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS
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Components	CAS-No.	Weight %	Trade Secret
Methyl Acrylate 96-33-3	96-33-3	100	*

4. FIRST AID MEASURES

First aid measures**General Advice:**

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Get medical attention. If skin irritation persists, call a physician.

Eye Contact:

Flush eye with water for 15 minutes. Get medical attention. If symptoms persist, call a physician.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

Ingestion: Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed

Symptoms Causes serious eye irritation. Causes skin irritation. May cause allergic skin reaction. May cause irritation of respiratory tract. Causes skin and eye burns. Nose and throat irritation. Coughing and wheezing. Dyspnea (Shortness of breath and difficulty breathing).

Indication of any immediate medical attention and special treatment needed

Notes to Physician: Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Alcohol-resistant foam. Carbon dioxide (CO₂). Dry chemical.

Unsuitable Extinguishing Media: Water.

Specific hazards arising from the chemical

Hazardous Combustion Products: Carbon oxides

Specific hazards: Flammable
Combustible material
Will be easily ignited by heat, sparks or flames
May form explosive mixtures with air
Most vapors are heavier than air. They will spread along the ground and collect in low or confined areas (sewers, basements, tanks)
When heated to decomposition it emits acrid smoke and irritating fumes

Special Protective Actions for Firefighters

Specific Methods: No information available.

Special Protective Equipment for Firefighters: As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions: Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. All equipment used when handling the product must be grounded. Remove all sources of ignition. Pay attention to flashback. Use spark-proof tools and explosion-proof equipment. Take precautionary measures against static discharges. In case of large spill, water spray or vapor suppressing foam may be used to reduce vapors, but may not prevent ignition in closed spaces.

Environmental precautions Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Absorb spill with inert material (e.g. vermiculite, dry sand or earth), then place in a suitable chemical waste container. In case of large spill, dike if needed. Dike far ahead of liquid spill for later disposal.

Methods for cleaning up Use appropriate tools to put the spilled material in a suitable chemical waste disposal container. Use only non-sparking tools. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Provide sufficient air exchange and/or exhaust in work rooms. Remove all sources of ignition. To avoid ignition of vapors by static electricity discharge, all metal parts of the equipment must be grounded. Keep away from incompatible materials.

Safe Handling Advice:

Wear personal protective equipment. Use only in well-ventilated areas. Avoid contact with skin, eyes and clothing. Keep away from heat and sources of ignition. Do not breathe vapors or spray mist. Do not ingest. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep refrigerated. Store at 2-8 deg. C. Keep away from heat and sources of ignition. Store away from incompatible materials.

Incompatible Materials:

Acids. Alkalis. Metals. Oxidizing agents. Peroxides. nitrates.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Methyl Acrylate - 96-33-3	10 ppm TWA 35 mg/m ³ TWA	= 10 ppm TWA	= 2 ppm TWA	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Methyl Acrylate - 96-33-3	= 2 ppm TWA = 7 mg/m ³ TWA	= 2 ppm TWA	2 ppm TWA	2 ppm TWAEV 7 mg/m ³ TWAEV

Australia and Mexico

Components	Australia	Mexico
Methyl Acrylate 96-33-3	35 mg/m ³ TWA 10 ppm TWA	= 10 ppm TWA = 35 mg/m ³ TWA

Appropriate engineering controls

Engineering measures to reduce exposure: Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors and mist below their respective threshold limit value.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles.
- Skin and body protection:** Chemical resistant apron. Impervious clothing. Gloves.
- Respiratory protection:** Vapor respirator. Be sure to use an approved/certified respirator or equivalent.
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state: Liquid	Appearance: No information available	Color: Colorless.
Odor: Acrid.	Taste No information available	Molecular/Formula weight: 86.09 g/mol
Formula: C6H6O2	Flash point (°C): -2.8°C	Flashpoint (°C/°F): -2.8°C/ 27°F
Flash Point Tested according to: Closed cup	Lower Explosion Limit (%): 2.8%	Upper Explosion Limit (%): 25%
Autoignition Temperature (°C/°F): 421°C/ 789.8°F	pH: No information available	Melting point/range(°C/°F): -75°C/ -103°F
Boiling point/range(°C/°F): 80.7°C/ 177.3°F	Decomposition temperature(°C/°F): No information available	Bulk density: No information available
Specific gravity: 0.9535	Density (g/cm3): No information available	Vapor pressure @ 20°C (kPa): 3.87
Evaporation rate: No information available	Vapor density: 2.97	VOC content (g/L): No information available
Odor threshold (ppm): 0.049	Partition coefficient (n-octanol/water): 0.80	Viscosity: No information available
Miscibility: No information available	Solubility: Soluble in Ethanol Soluble in Acetone Soluble in Chloroform Soluble in Benzene Soluble in water: 1.8 mL/ 100 g @ 20°C	

10. STABILITY AND REACTIVITY

Reactivity

Reactive with metals, acids, alkalis, nitrates, oxidizing agents and peroxides

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of Hazardous Reactions: Polymerization process speeded up by heat, light, and peroxides
Hazardous polymerization may occur above 20 deg C

Conditions to avoid: Avoid excessive heat and light. Ignition sources. Incompatible materials.

Incompatible Materials: Acids. Alkalis. Metals. Oxidizing agents. Peroxides. nitrates.

Hazardous decomposition products: Carbon oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation. Skin.

Acute Toxicity

Component Information

Methyl Acrylate - 96-33-3

LD50/oral/rat = 277 mg/kg Oral LD50 Rat

LD50/oral/mouse = 826 mg/kg

LD50/dermal/rat = 1243 mg/kg Dermal LD50 Rat

LD50/dermal/rabbit = 1243 mg/kg Dermal LD50Rabbit

LC50/inhalation/rat = 3.5 mg/L Inhalation LC50 Rat 4 h
1350 ppm Inhalation LC50 Rat 4 h

LC50/inhalation/mouse = 5.1 mg/l 4 h

Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 277mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 826mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = 1243mg/kg

LD50/dermal/rat

VALUE -Acute Tox Dermal = 1243mg/kg

LC50/inhalation/rat

VALUE-Vapor = 3.5

VALUE-Gas = No information availablemg/l

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = 5.1 mg/l

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact: Causes skin irritation. Causes burns. May cause allergic skin reaction.

Eye Contact: Causes severe eye irritation and possible burns.

Inhalation May cause respiratory tract irritation.

Ingestion Causes digestive (gastrointestinal) tract irritation.

Aspiration hazard No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity Prolonged or repeated ingestion may cause nausea, vomiting, diarrhea. Prolonged or repeated inhalation may cause difficulty breathing, shortness of breath. Prolonged or repeated inhalation may cause headache.

Sensitization: May cause sensitization by skin contact

Mutagenic Effects: No information available

Carcinogenic effects: Not considered carcinogenic

Components	ACGIH - Carcinogens	IARC	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Methyl Acrylate	A4 Not Classifiable as a Human Carcinogen	Monograph 71 [1999] Monograph 39 [1986]	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity No data is available

Reproductive Effects: No information available

Developmental Effects: No information available

Teratogenic Effects: No information available

Specific Target Organ Toxicity

STOT - single exposure Respiratory Tract.

STOT - repeated exposure No information available

Target Organs: Mucous membrane. Kidneys. Liver.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Methyl Acrylate - 96-33-3

Freshwater Algae Data: 0 - 46.78 mg/L EC50 *Pseudokirchneriella subcapitata* 96 h
15 mg/L EC50 *Desmodesmus subspicatus* 72 h

Freshwater Fish Species Data: 1.1 mg/L LC50 *Cyprinodon variegatus* 96 h flow-through 1

Water Flea Data: 2.2 mg/L EC50 *Daphnia magna* 48 h

Persistence and degradability: 37% (BOD)

Bioaccumulative potential: An estimated Biocentration Factor (BCF) value of 3.

Mobility: It is expected to have high mobility in soil.

13. DISPOSAL CONSIDERATIONS

Disposal Methods

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Methyl Acrylate	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN1919
Proper Shipping Name: Methyl acrylate, stabilized
Hazard Class: 3
Subsidiary Risk:
Packing Group: II
ERG No: 129P
Marine Pollutant: No data available
DOT RQ (lbs): No information available

Symbol(s):

TDG (Canada)

UN-No: UN1919
Proper Shipping Name: Methyl acrylate, stabilized
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: No information available

ADR

UN-No: UN1919
Proper Shipping Name: Methyl acrylate, stabilized
Hazard Class: 3
Packing Group: II
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: UN1919
Proper Shipping Name: Methyl acrylate, stabilized
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-E
MFAG: No information available
Maximum Quantity: No information available

14. TRANSPORT INFORMATION

RID

UN-No: UN1919
Proper Shipping Name: Methyl acrylate, stabilized
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN1919
Proper Shipping Name: Methyl acrylate, stabilized
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
Description: No information available

IATA

UN-No: UN1919
Proper Shipping Name: Methyl acrylate, stabilized
Hazard Class: 3
Subsidiary Risk: No information available
Packing Group: II
ERG Code: 3HI
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
<i>Methyl Acrylate</i>	Present	Present KE-29592	Present	Present (2)-987	Present	Present	Present 202-500-6

U.S. Regulations

Methyl Acrylate

Massachusetts RTK: Present
New Jersey RTK Hazardous Substance List: 1219
New Jersey (EHS) List: 1219 500 lb TPQ
New Jersey - Discharge Prevention - List of Hazardous Substances: Present
Pennsylvania RTK: Environmental hazard
Pennsylvania RTK - Environmental Hazard List: Present
Pennsylvania RTK - Special Hazardous Substances: Present
RI RTK - Hazardous Substances List: Present
Minnesota - Hazardous Substance List: Present
Louisiana Reportable Quantity List for Pollutants: Listed
California Directors List of Hazardous Substances: Present

FDA - 21 CFR - Total Food Additives 175.105 175.300 175.320 175.360 175.365 176.170 176.180 177.1010 177.1200
 177.1340 177.1480 177.1630 177.1650 177.1990 177.2000 177.2420

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Methyl Acrylate	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Methyl Acrylate	None	None	None	None	1.0 % de minimis concentration

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Methyl Acrylate	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

- B2 Flammable liquid
- D1A Very toxic materials
- D2B Toxic materials
- E Corrosive material
- F Dangerously reactive material

Methyl Acrylate

B2 D1A D2B E F

Canada Controlled Products Regulation:

This product has been classified according to the hazard criteria of the CPR (Controlled Products Regulation) and the MSDS contains all of the information required by the CPR.

Components	WHMIS Ingredient Disclosure List -
Methyl Acrylate	1 %

Inventory

Components	Canada (DSL)	Canada (NDSL)
Methyl Acrylate	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Methyl Acrylate	Not listed	Not listed

EU Classification

R-phrases(s)

- R11 - Highly flammable.
- R43 - May cause sensitization by skin contact.
- R20/21/22 - Harmful by inhalation, in contact with skin and if swallowed.
- R36/37/38 - Irritating to eyes, respiratory system and skin.

S -phrase(s)

S 2 - Keep out of the reach of children.

S 9 - Keep container in a well-ventilated place.

S25 - Avoid contact with eyes.

S33 - Take precautionary measures against static discharges.

S43 - In case of fire use Dry Chemical powder, Dry Sand. Never use water

S36/37 - Wear suitable protective clothing and gloves.

Components	Classification	Concentration Limits:	Safety Phrases
Methyl Acrylate	F; R11 Xn; R20/21/22 Xi; R36/37/38 R43	No information	S2 S9 S25 S26 S33 S36/37 S43

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

F - Highly flammable.

Xn - Harmful.

Xi - Irritant.

**16. OTHER INFORMATION**

16. OTHER INFORMATION

Preparation Date: 04/27/2015
Revision Date: 04/27/2015
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet