



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: Methacrylic acid Molecular Formula: C₄H₆O₂
Catalog Number(s): M-151
Company: Scientific Polymer Products, Inc.
6265 Dean Parkway
Ontario, NY 14519
Telephone: 585/265-0413
Fax: 585/265-1390
Website: www.scipoly.com
Emergency Phone Number: 800-255-3924 (CHEM TEL)

Section 2: Hazards Identification

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Flammable liquids, Category 4, H227
Acute toxicity, Oral, Category 4, H302
Acute toxicity, Inhalation, Category 4, H332
Acute toxicity, Dermal, Category 3, H311
Skin corrosion, Category 1, H314
Serious eye damage, Category 1, H318
Specific target organ toxicity – single exposure, Category 3, Respiratory system, H335
Acute aquatic toxicity, Category 3, H402

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H227 Combustible liquid.
H302+H332 Harmful if swallowed or if inhaled.
H311 Toxic in contact with skin.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.
H402 Harmful to aquatic life.

Precautionary statement(s)

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.

P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312+P330	IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304+P340+P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305+P351+P338+P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor. Take off contaminated clothing and wash before reuse.
P362	
P370+P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P403 +
P233	Store in a well-ventilated place. Keep container tightly closed.
P301+P310+P331	IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P403+P235	Store in a well ventilated place. Keep cool.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

Hazards not otherwise classified (HNOC) or not covered by GHS – none

To the best of our knowledge, the toxicological properties of this chemical have not been thoroughly investigated. Use appropriate procedures and precautions to prevent or minimize exposure.

Section 3: Composition/Information on Ingredients

Ingredient	CAS Number	Concentration (%)
Methacrylic acid	79-41-4	100

Section 4: First Aid Measures

Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician. Continue rinsing eyes during transport to hospital.

If swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician

Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11

Indication of any immediate medical attention and special treatment needed

No data available

Section 5: Fire-Fighting Measures

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special hazards arising from the substance or mixture

No data available

Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

Further information

Use water spray to cool unopened containers

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Remove all sources of ignition. Evacuate personnel to safe areas. Beware of vapors accumulating to form explosive concentrations. Vapors can accumulate in low areas.

For personal protection see section 8.

Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Methods and materials for containment and cleaning up

Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container for disposal according to local regulations (see section 13). Keep in suitable, closed containers for disposal.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

Keep away from sources of ignition-No smoking. Take measure to prevent the buildup of electrostatic charge.

For precautions see section 2.

Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

Specific end use(s)

Laboratory chemicals, Manufacture of substances

Section 8: Exposure Controls/Personal Protection

Control parameters

Components with workplace control parameters

Component	CAS-No	Value	Control parameters	Basis
Methacrylic acid	79-41-4	TWA	20 ppm	USA. ACGIH Threshold Limit Values (TLV)
	Remarks	Eye irritation Skin irritation		
		TWA	20 ppm	USA. ACGIH Threshold Limit Values (TLV)

		Eye irritation Skin irritation		
		TWA	20 ppm 70 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		TWA	20 ppm 70 mg/m3	USA. NIOSH Recommended Exposure Limits
		Potential for dermal absorption		
		PEL	20 ppm 70 mg/m3	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
		Skin		

Exposure controls

Appropriate engineering controls

Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

Personal protective equipment

Eye/face protection

Face shield and safety glasses. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Where risk assessment shows air purifying respirators are appropriate use a full face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage of spillage if safe to do so. Do not let product enter drains.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a)	Appearance	Form: Liquid
b)	Odor	No data available
c)	Odor Threshold	No data available
d)	pH	No data available
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	No data available
g)	Flash point	77° C (171° F)- closed cup
h)	Evaporation rate	No data available
i)	Flammability (solid, gas)	No data available
j)	Flammability or explosive limits	
	Upper	No data available
	Lower	No data available
k)	Vapor pressure	No data available
l)	Vapor density	No data available
m)	Relative density	No data available
n)	Water solubility	No data available
o)	Partition coefficient: n- octanol/water	No data available
p)	Auto-ignition temperature	No data available

q)	Decomposition temperature	No data available
r)	Viscosity	No data available
s)	Explosive properties	No data available
t)	Oxidizing properties	No data available

Other safety information

No data available

Section 10: Stability and Reactivity

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of hazardous reactions

No data available

Conditions to avoid

Heat, flames and sparks.

Incompatible materials

Amines, Strong bases, Strong acids, Oxidizing agents, Peroxides

Hazardous decomposition products

Hazardous decomposition products formed under fire conditions- Carbon oxides

Other decomposition products- no data available

In the event of fire: see section 5

Section 11: Toxicological Information

Acute toxicity

LD50 Oral- Rat- male – 1,320 mg/kg
(OECD Test Guideline 401)

LC50 Inhalation –Rat- 4 h – 0.9-4.7 mg/l
(OECD Test Guideline 403)

LD50 Dermal- Rabbit- 500-1,000 mg/kg

Skin Corrosion/Irritation

Skin- Rabbit

Result: Causes severe burns – 4 h
(OECD Test Guideline 404)

Serious Eye Damage/Eye Irritation

Eyes- Rabbit

Result: Severe eye irritation
(Draize Test)

Respiratory or Skin Sensitization

Maximization Test- Guinea pig

Does not cause skin sensitization
(OECD Test Guideline 406)

Germ Cell Mutagenicity

Ames test

S. typhimurium

Result: negative

Carcinogenicity:

IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by OSHA.

Reproductive Toxicity

No data available

Specific Target Organ Toxicity – Single Exposure

May cause respiratory irritation.

Specific Target Organ Toxicity – Repeated Exposure

No data available

Aspiration Hazard

No data available

Additional Information:

Repeated dose toxicity Rat – male and female – Inhalation – NOAEL: 100 mg/kg – OECD Test Guideline 413

RTECS: OZ2975000

Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin. Cough, Shortness of breath, Headache, Nausea

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

Stomach – Irregularities – Based on Human Evidence

Section 12: Ecological Information

Toxicity

Toxicity to fish LC50- Oncorhynchus mykiss (rainbow trout) – 85 mg/l – 96 h

Toxicity to daphnia and other EC50- Daphnia magna (Water flea) – 130 mg/l – 48 h
aquatic invertebrates

Persistence & Degradability

Biodegradability Aerobic- Exposure time 28 d
Result: > 86% - Readily biodegradable
(OECD Test Guideline 301D)

Bioaccumulation Potential

No data available

Mobility in Soil

No data available

Results of PBT and vPvB Assessment:

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.

Other Adverse Effects

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.
Harmful to aquatic life

Section 13: Disposal Considerations

Waste treatment methods

Product

This combustible material may be burned in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material.

Contaminated packaging

Dispose of as unused product.

Section 14: Transport Information

DOT (US)

UN number: 2531 Class: 8 Packing group: II
Proper shipping name: Methacrylic acid, stabilized
Reportable quantity (RQ): 100 lbs.
Poison Inhalation Hazard: No

IMDG

UN number: 2531 Class: 8 Packing group: II
Proper shipping name: Methacrylic acid, stabilized
Marine pollutant: Yes

IATA

UN number: 2531 Class: 8 Packing group: II
Proper shipping name: Methacrylic acid, stabilized

Section 15: Regulatory Information

SARA 302 Components

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Fire Hazard, Acute Health Hazard, Chronic Health Hazard

Massachusetts Right To Know Components

Methacrylic acid	CAS No. 79-41-4
------------------	--------------------

Pennsylvania Right To Know Components

Methacrylic acid	CAS No. 79-41-4
------------------	--------------------

New Jersey Right To Know Components

Methacrylic acid	CAS No. 79-41-4
------------------	--------------------

California Prop. 65 Components

This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other Information

HMIS Rating

Health: 3
Flammability: 2
Reactivity: 0

NFPA Rating

Health: 3
Flammability: 2
Reactivity: 0

This material is intended for laboratory use only. It is not sold or intended for drug, household or other uses. The information represents the most accurate and complete data currently available to us. However, we make no warranty, express or implied, with respect to such information, and we assume no liability resulting from its use.