



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

**Product Name:** Methacrylic anhydride      **Molecular Formula:** C<sub>8</sub>H<sub>10</sub>O<sub>3</sub>  
**Catalog Number:** M-174  
**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  
Skin irritation, Category 2, H315  
Serious eye damage, Category 1, H318  
Skin sensitization, Category 1, H317  
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.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
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/fumes/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.

P272	Contaminated work clothing should not be allowed out of the workplace.
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 or doctor/physician if you feel unwell. Rinse mouth.
P302+P352	IF ON SKIN: Wash with plenty of soap and water.
P304+P340+P312	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
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.
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 anhydride	760-93-0	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**

Wash off with soap and plenty of water. Consult a physician.

**In case of eye contact**

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

**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**

Carbon oxides

**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)

**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.

Storage class (TRGS 510): Combustible, corrosive hazardous materials

**Specific end use(s)**

Laboratory chemicals, Manufacture of substances

**Section 8: Exposure Controls/Personal Protection**

**Control parameters**

**Components with workplace control parameters**

Contains no substances with occupational exposure limit values. Hazardous components without workplace parameters.

**Exposure controls**

**Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**Personal protective equipment**

**Eye/face protection**

Tightly fitting safety goggles. Faceshield (8-inch minimum). 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. Flame retardant antistatic protective clothing. 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. Discharge into the environment must be avoided.

## 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	-20° C (-4° F)
f)	Initial boiling point and boiling range	200° C (392° F) @ 1,013 hPa (= mbar)
g)	Flash point	83° C (181° F)
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	1.02 g/cm @ 20° C (68° F)
n)	Water solubility	Miscible with esters and ketones
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**

Strong oxidizing agents, Strong bases

**Hazardous decomposition products**

Other decomposition products- no data available  
In the event of fire: see section 5

**Section 11: Toxicological Information****Information on toxicological effects****Acute toxicity**

LD50 Oral-Rat-male-890 mg/kg  
(OECD Test Guideline 401)

LD50 Oral-Rat-female-1,760 mg/kg  
(OECD Test Guideline 401)

LC50 Inhalation-Rat-4 h ->2,081 mg/l  
(OECD Test Guideline 403)

**Skin corrosion/irritation**

Skin-Rabbit

Result: Irritating to skin

**Serious eye damage/eye irritation**

Eyes-Rabbit

Result: Risk of serious damage to eyes

Eyes- Human

Result: Severe eye irritation

**Respiratory or skin sensitization**

In vivo assay- Mouse

May cause sensitization by skin contact  
(OECD Test Guideline 429)

**Germ cell mutagenicity**

Result: Not mutagenic in Ames Test  
OECD Test Guideline 478

Mouse

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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential 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**  
RTECS: OZ5700000

## Section 12: Ecological Information

### Toxicity

Toxicity to fish                      Flow through test LC50- Oncorhynchus mykiss (Rainbow trout)- 85 mg/l-96 h  
Remarks: Read-across (Analogy)

Flow through test NOEC- Danio rerio (Zebra fish) – 10 mg/l – 35 d  
Remarks: Read-across (Analogy)

Toxicity to daphnia and other aquatic invertebrates                      Flow through test EC50- Daphnia magna (Water flea)- 130 mg/l-48 h  
Remarks: Read-across (Analogy)

NOEC- Daphnia magna (Water flea)- 53 mg/l – 21 d  
Remarks: Read-across (Analogy)

Toxicity to algae                      EC50- Pseudokirchneriella subcapitata (green algae)- 45 mg/l- 72 h  
Remarks: Read-across (Analogy)

**Persistence and degradability**  
Biodegradability

Result: 86% - Readily biodegradable  
(OECD Test Guideline 301D)  
Remarks: Read-across (Analogy)

**Bioaccumulative 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

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional and national hazardous waste regulations to ensure complete and accurate classification.

#### Contaminated packaging

Dispose of as unused product.

## Section 14: Transport Information

### DOT (US)

UN number: 3265

Class: 8

Packing group: II

Proper shipping name: Corrosive liquid, acidic, organic, n.o.s. (Methacrylic anhydride)

Poison Inhalation Hazard: No

