



**Section 1: Identification**

**PRODUCT AND COMPANY INFORMATION**

**Product Name:** Caprolactone acrylate                                    **Molecular Formula:** (C<sub>6</sub>H<sub>10</sub>O<sub>2</sub>)<sub>x</sub>•C<sub>5</sub>H<sub>8</sub>O<sub>3</sub>

**Catalog Number(s):** M-267

**Company:** Scientific Polymer Products, Inc.  
6265 Dean Parkway  
Ontario, NY 14519

**Telephone:** 585/265-0413

**Fax:** 585/265-1390

**Website:** [www.scipoly.com](http://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)**

Acute toxicity, Dermal, Category 3, H311  
Skin corrosion, Category 1B, H314  
Serious eye damage, Category 1, H318  
Skin sensitization, Category 1, H317

**GHS Label elements, including precautionary statements**

Pictogram



Signal word

Danger

Hazard statement(s)

H311 Toxic in contact with skin.  
H314 Causes serious skin burns and eye damage.  
H317 May cause an allergic skin reaction.

Precautionary statement(s)

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.  
P264 Wash skin thoroughly after handling.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. 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 victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 IF IN EYES, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P310 Immediately call a POISON CENTER or doctor/physician.  
P333+P313 If skin irritation or rash occurs, get medical advice/attention.

P363 Wash contaminated clothing before reuse.  
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 (%)
Caprolactone acrylate	110489-05-9	> = 80 - < = 100%
2-Propenoic acid, 2-hydroxyethyl ester	818-61-1	> = 5 - < 20%
2-Propenoic acid, 1,2-ethanediyl ester	2274-11-5	> = 1 - < 5%

**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. If breathing is difficult, give oxygen. Consult a physician.

**In case of skin contact**

Take off contaminated clothing and shoes immediately. Wash off with soap and plenty of water for at least 15 minutes. Get medical attention immediately. Wash clothing before reuse. Thoroughly clean shoes before reuse.

**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. Get medical attention immediately. Never give anything by mouth to an unconscious person. If victim is fully conscious, give a cupful of water.

**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. Closed containers of this material may explode when subjected to heat from surrounding fire.

## Section 6: Accidental Release Measures

### Personal precautions, protective equipment and emergency procedures

Wear respiratory protection. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe 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 non-combustible absorbent material such as clean sand, earth, diatomaceous earth or non-acidic clay and place in suitable properly labeled 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. Do not taste or swallow. Use only with adequate ventilation. Wash thoroughly after handling. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. 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. Inhibitor levels should be maintained. Store separate Strong oxidizing agents, Strong reducing agents, Free radical generators, Inert gas, Oxygen scavenger, Peroxides

Temperature tolerance- Do not store below 32° F (0° C)

Temperature tolerance- Do not store above 100° F (38° C)

### Specific end use(s)

Laboratory chemicals, Manufacture of substances

## Section 8: Exposure Controls/Personal Protection

### Control 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. Face shield (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. 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	Sour
c)	Odor Threshold	No data available
d)	pH	~7
e)	Melting point/freezing point	No data available
f)	Initial boiling point and boiling range	No data available
g)	Flash point	277° F (136° C) Setflash 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	1.100 @ 20° C (68° F)
n)	Water solubility	Negligible
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

This material is chemically stable under normal and anticipated storage, handling and processing conditions. However, this material can undergo hazardous polymerization.

### Possibility of hazardous reactions

Hazardous polymerization may occur. Polymerization is exothermic and can degenerate into an uncontrolled reaction.

### Conditions to avoid

This material polymerizes exothermically in the presence of heat, contamination, oxygen free atmosphere, free radicals, peroxides and inhibitor depletion liberating heat. Avoid direct sunlight. Do NOT expose to ultraviolet light.

### Incompatible materials

Strong reducing agents, Free radical generators, Inert gas, Oxygen scavenger, Peroxides, Strong oxidizing agents

### Hazardous decomposition products

Thermal decomposition giving flammable and toxic products- Carbon oxides, Acrylates, Hazardous organic compounds

In the event of fire: see section 5

### Acute toxicity

Oral- Acute toxicity estimate 2,346 mg/kg

Dermal –Acute toxicity estimate 253.48 mg/kg

### Skin Corrosion/Irritation

Causes severe skin burns. (Rabbit) Irritation Index: 8.0/8.0 (24 h)

Causes severe skin burns (Rabbit) (4 h)

### Serious Eye Damage/Eye Irritation

Causes serious eye damage. (Rabbit) Irritation Index: 96.7/110

### Respiratory or Skin Sensitization

May cause an allergic skin reaction. Guinea pig maximization test. (Guinea pig) Skin allergy was observed.

May cause an allergic skin reaction. LLNA: Local Lymph Node Assay. (Mouse) Skin allergy was observed.

### Germ Cell Mutagenicity

No data available

### Carcinogenicity:

Chronic inhalation administration to Rat/ affected organ(s): upper respiratory tract/ signs: irritation, damage/ No increase in tumor incidence was reported.

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

Repeated administration. Inhalation (Rat)/ Did not cause damage to the reproductive organs.

### Specific Target Organ Toxicity – Single Exposure

No data available

### Specific Target Organ Toxicity – Repeated Exposure

Subchronic dietary administration to rat and dog/ No adverse systemic effects reported.

Subacute and chronic inhalation administration to Rat/ affected organ(s): nasal tissues, Eyes/ signs: Irritating to ocular and respiratory mucous membranes.

### Aspiration Hazard

No data available

### Additional Information:

Possible cross sensitization with other acrylates and methacrylates.

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

## Section 12: Ecological Information

### Toxicity

Aquatic toxicity data: Toxic. Pimephales promelas (fathead minnow) 96 h LC50 = 4.8 mg/l  
Aquatic invertebrates: Very toxic. Daphnia magna (Water flea) 48 h LC50 = 0.78 mg/l  
Algae: Toxic. Chlorella vulgaris (Fresh water algae) 72 h LC50 = 1.53 mg/l  
Microorganisms: Activated sludge 72 h EC10 (Respiration inhibition of activated sludge) >100 mg/l  
Chronic toxicity to aquatic invertebrates: Daphnia magna (Water flea) 21 d EC50 (reproduction) = 0.74 mg/l  
Daphnia magna (Water flea) 21 d NOEC (Reproduction) = 0.48 mg/l

### Persistence & Degradability

Biodegradation: Readily biodegradable. (28 d) Biodegradation 80%

### Bioaccumulation Potential

Octanol Water Partition Coefficient:  $\log Pow = -0.21$  (Practically no potential to bioaccumulate.)

### Mobility in Soil

This material is expected to have high mobility in soil. It absorbs weakly to most soil types

### Results of PBT and vPvB Assessment:

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

### Other Adverse Effects

No data available

## Section 13: Disposal Considerations

### Waste treatment methods

#### Product

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: 1760 Class: 8 Packing group: III  
Proper shipping name: Corrosive liquids, n.o.s. (2-hydroxyethyl acrylate)  
Poison Inhalation Hazard: No

### IMDG

UN number: 1760 Class: 8 Packing group: III  
Proper shipping name: Corrosive liquids, n.o.s. (2-hydroxyethyl acrylate)  
Poison Inhalation Hazard: No

### IATA

UN number: 1760 Class: 8 Packing group: III  
Proper shipping name: Corrosive liquids, n.o.s. (2-hydroxyethyl acrylate)  
Poison Inhalation Hazard: No

## Section 15: Regulatory Information

### SARA 302 Components

The components in this product are either not SARA Section 302 regulated or regulated but present in negligible concentrations.

### 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

Acute Health Hazard, Reactivity Hazard

### Massachusetts Right to Know Components

2-Propenoic acid, 2-hydroxyethyl ester	CAS No. 818-61-1
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### Pennsylvania Right to Know Components

Caprolactone acrylate	CAS No. 110489-05-9
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### New Jersey Right to Know Components

2-Propenoic acid, 2-hydroxyethyl ester	CAS No. 818-61-1
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### 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:	1
Flammability:	1
Reactivity:	2

### NFPA Rating

Health:	1
Flammability:	1
Reactivity:	2

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.