



Section 1: Identification

PRODUCT AND COMPANY INFORMATION

Product Name: 2-Hydroxypropyl acrylate **Molecular Formula:** C₆H₁₀O₃
Catalog Number: M-143
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)

Acute toxicity, Oral, Category 3, H301
Acute toxicity, Inhalation, Category 3, H331
Acute toxicity, Dermal, Category 3, H311
Skin corrosion, Category 1B, H314
Serious eye damage, Category 1, H318
Skin sensitization, Category 1, H317
Short term(acute) aquatic hazard, Category 2, H401
Long term(chronic) aquatic hazard, Category 3, H412

GHS Label elements, including precautionary statements

Pictogram



Signal word

Danger

Hazard statement(s)

H301 + H311 + H331 Toxic if swallowed, in contact with skin or inhaled.
H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.
H401 Toxic to aquatic life.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statement(s)

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 into the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

P301+P310+P330	IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. 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.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well ventilated place. Keep container tightly closed.
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 (%)
2-Hydroxypropyl acrylate	25584-83-2	100

Section 4: First Aid Measures

Description of first aid measures

General advice

First aiders need to protect themselves. Show this safety data sheet to the doctor in attendance.

If inhaled

If breathed in, move person into fresh air. If not breathing, immediately 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. Immediate medical attention is required. Wash contaminated clothing before re-use. Do not take clothing home to be laundered. Discard contaminated shoes, belt and other articles made of leather. Consult a physician.

In case of eye contact

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

If swallowed

If swallowed: give water to drink (two glasses at most). Seek medical advice immediately. In exceptional cases only, if medical care is not available within one hour, induce vomiting (only in persons who are wide awake and fully conscious). Administer activated charcoal (20-40g in a 10% slurry) and consult a doctor as quickly as possible. Do not attempt to neutralize.

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. Combustible. Vapors are heavier than air and may spread along the floor. Forms explosive mixtures with air on intense heating. Development of hazardous combustion gases or vapors possible in the event of fire

Advice for firefighters

EXPLOSION HAZARD. Wear self-contained breathing apparatus and protective suit for firefighting. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

Further information

Cool containers with water spray. Heat can cause polymerization. Heated containers can explode. Prevent fire extinguishing water from contaminating surface water or the ground water system.

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

Methods and materials for containment and cleaning up

Cover drains. Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Contaminated monomer may be unstable. Add inhibitor to prevent polymerization. Absorbent can act as a contaminant (removes inhibitor) in liquid monomer. Avoid freestanding monomer with absorbent or add inhibitor to stabilize. Dispose of promptly.

Reference to other sections

For disposal see section 13.

Section 7: Handling and Storage

Precautions for safe handling

Work under hood. This material is a severe irritant. This material is a potential skin sensitizer. Avoid contact with skin and eyes. Avoid inhalation of vapor or mist.

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): 6.1A: Combustible, Acute Toxic Cat. 31 and 2/very toxic hazardous materials or hazardous materials causing chronic effects

Recommended storage temperature $\leq 38^{\circ}\text{C}$

Heat sensitive

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 control parameters

Exposure controls

Appropriate engineering controls

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

Personal protective equipment

Eye/face protection

Use chemical splash goggles. 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. Discharge into the environment must be avoided.

Section 9: Physical and Chemical Properties

Information on basic physical and chemical properties

a)	Appearance	Form: Liquid, colorless
b)	Odor	Slight acrylic odor; Faint-unpleasant
c)	Odor Threshold	No data available
d)	pH	~ 5.0
e)	Melting point/freezing point	-23.4° C (-10.12° F)
f)	Initial boiling point and boiling range	198.5° C @ 1,013 hPa
g)	Flash point	99° C
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	1.0500 @ 20° C (68° F)
n)	Water solubility	At 20° C completely soluble
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	Not explosive
t)	Oxidizing properties	Not classified as oxidizing

Other safety information

No data available

Section 10: Stability and Reactivity

Reactivity

Forms explosive mixtures with air on intense heating.

Chemical stability

Inhibitor is added to this product to prevent polymerization. However, this material can undergo hazardous polymerization. Excessive aging, heat, contamination with polymerization catalysts, oxygen-free atmosphere, inhibitor depletion or ultraviolet light (sunlight) may cause polymerization. An uncontrolled polymerization may produce a rapid release of energy with the potential for an explosion of unvented closed containers. This material is considered stable under specified conditions of storage, shipment and/or use.

Possibility of hazardous reactions

No data available

Conditions to avoid

Strong heating

Incompatible materials

Oxidizing agents, Acids, Bases, Reducing agents, UV light, Free radical initiators, Organic peroxides, Mild steel

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 - 820-1,001 mg/kg

Swallowing may result in irritation or burns of the mouth, throat and gastrointestinal tract

LC50 Inhalation- Rat, male and female, 8 hour, vapor > 0.38 mg/l

The LC50 value is greater than the Maximum Attainable Concentration

LD50 Dermal-Rabbit >1,000 mg/kg

Skin corrosion/irritation

Brief contact may cause skin burns. Symptoms may include pain, severe local redness and tissue damage. May cause more severe response on covered skin (under clothing, gloves)

Serious eye damage/eye irritation

May cause severe irritation with corneal injury which may result in permanent impairment of vision, even blindness. Chemical burns may occur. Vapor may cause eye irritation experienced as mild discomfort and redness

Respiratory or skin sensitization

Skin contact may cause an allergic skin reaction. For respiratory sensitization: No relevant data found

Germ cell mutagenicity

In vitro studies showed both positive and negative effects. In vivo tests did not show mutagenic effects

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

No data available

Specific target organ toxicity - repeated exposure

Based on available data, repeated exposures are not anticipated to cause additional significant adverse effects

Aspiration hazard

No data available

Additional Information

RTECS: Not available

Section 12: Ecological Information

Toxicity

Toxicity to fish	LC50, Fathead minnow (<i>Pimephales promelas</i>), flow through test, 96 Hour, 3.61 mg/l (OECD Test Guideline 203)
Toxicity to daphnia and Other aquatic Invertebrates	EC50-Daphnia magna (Water flea), static test, 48 Hour, 5.2-24 mg/l (OECD Test Guideline 202)
Toxicity to algae	ErC50-Selenastrum capricornutum (green algae)-static test, 72 Hour, Growth rate, 6.98 mg/l (OECD Test Guideline 201)

Chronic toxicity to aquatic invertebrates: NOEC, Daphnia magna, 21 d, 0.48 mg/l

Persistence and degradability

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready biodegradability
Biodegradation: 90-100%
Exposure time: 14 d
Method: OECD Test Guideline 301A or Equivalent

Chemical Oxygen demand: 1,700 mg/g

Physico-chemical removability: Rapidly hydrolyzed under alkaline conditions

Bioaccumulative potential

Bioaccumulation: Bioconcentration potential is low (BCF < 100 or Log Pow < 3)
Partition coefficient: n-octanol/water (log Pow): Pow: 0.2 at 25° C

Mobility in soil

Potential for mobility in soil is very high (Koc between 0 and 50)

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. Very toxic 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: 2922 Class: 6.1 (8) Packing group: II
Proper shipping name: Corrosive liquid, Toxic, n.o.s. (2-Hydroxypropyl acrylate)
Poison Inhalation Hazard: No

IMDG

UN number: 2922 Class: 6.1 (8) Packing group: II
Proper shipping name: Corrosive liquid, Toxic, n.o.s. (2-Hydroxypropyl acrylate)

IATA

UN number: 2922 Class: 6.1 (8) Packing group: II
Proper shipping name: Corrosive liquid, Toxic, n.o.s. (2-Hydroxypropyl acrylate)

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

Acute Health Hazard

Massachusetts Right to Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right to Know Components

2-Hydroxypropyl acrylate	CAS No. 25584-83-2
--------------------------	-----------------------

New Jersey Right to Know Components

2-Hydroxypropyl acrylate	CAS No. 25584-83-2
--------------------------	-----------------------

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:	1
Reactivity:	0

NFPA Rating

Health:	3
Flammability:	1
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.