


Section 1. Product and Company Identification

Product Name 2-Hydroxypropyl Acrylate
CAS Number 25584-83-2

Parchem - fine & specialty chemicals

415 Huguenot Street
New Rochelle, NY 10801

 **(914) 654-6800**  **(914) 654-6899**

 **parchem.com**  **info@parchem.com**

EMERGENCY RESPONSE NUMBER
CHEMTEL

Toll Free US & Canada: 1 (800) 255-3924

All other Origins: 1 (813) 248-0585

Collect Calls Accepted

Section 2. Hazards Identification

Classification of the substance or mixture

GHS classification in accordance with (US) OSHA (29 CFR 1910.1200)

Acute toxicity, oral (chapter 3.1): Cat. 4

Acute toxicity, dermal (chapter 3.1): Cat. 2

Skin corrosion/irritation (chapter 3.2): Cat. 1A

Skin corrosion/irritation (chapter 3.2): Cat. 1B

Skin corrosion/irritation (chapter 3.2): Cat. 1C

Eye damage/irritation (chapter 3.3): Cat. 1

Sensitization, skin (chapter 3.4): Cat. 1

Specific target organ toxicity, single exposure (chapter 3.8): Cat. 2

Specific target organ toxicity, repeated exposure (chapter 3.9): Cat. 1

Hazardous to the aquatic environment - acute hazard (chapter 4.1): Cat. 2

GHS Label Elements

Pictograms:



Signal word: DANGER

Hazard and precautionary statements

Hazard statement(s)

H302: Harmful if swallowed

H310: Fatal in contact with skin

H314: Causes severe skin burns and eye damage

H318: Causes serious eye damage

H317: May cause an allergic skin reaction

- H371:** May cause damage to organs (respiratory system)
H372: Causes damage to organs (respiratory) through prolonged or repeated exposure
H401: Toxic to aquatic life

Precautionary statement(s)

- P260:** Do not breathe dust/fume/gas/mist/vapors/spray.
P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
P262: Do not get in eyes, on skin, or on clothing.
P264: Wash thoroughly hands and face after handling.
P270: Do not eat, drink or smoke when using this product.
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.
P310: Immediately call a POISON CENTER or doctor/physician.
P314: Get medical advice/attention if you feel unwell.
P330: Rinse mouth.
P361+P364: Take off immediately all contaminated clothing and wash it before reuse. **P363:** Wash contaminated clothing before reuse.
P301+P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. **P302+P352 IF ON SKIN:** Wash with plenty of soap and water.
P303+P361+P353 IF ON SKIN (or hair): 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.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P308+P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.
P333+P313 If skin irritation or a rash occurs: Get medical advice/attention.
P405: Store locked up.
P501: Dispose of contents/container in accordance with local/regional/national/international regulation.

Other hazards which do not result in classification: The product can be charged with static electricity. Even though a polymerization inhibitor is added, polymerization can be initiated by heating, direct sunlight, peroxides, and iron rust. Progress of polymerization can cause temperature increase and accelerated vapor pressure rise, resulting in explosion.

Section 3. Composition / Information on Ingredients

Common Name	2-Hydroxypropyl Acrylate
Synonym(s)	acrylic acid, monoester with propane-1,2-diol [3]; propylene glycol acrylate; 2-propenoic acid; beta-hydroxypropyl acrylate; acrylic acid, monoester with propane-1,2-diol
CAS Number	25584-83-2



COMPONENT	CAS NUMBER	CONCENTRATION
2-Hydroxypropyl Acrylate (inhibited)	999-61-1	70 - 80%
2-hydroxy-1-methylethylacrylate (inhibited) (impurity)	2918-23-2	20 - 30%

Section 4. First Aid Measures

If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention.

In case of skin contact: Immediately wipe away the attached material with cloths and the like rapidly. Wash with plenty of soap and water. Immediately call a poison center or a physician.

In case of eye contact: Wash the eyes with clean water for at least several minutes (desirably 15 minutes or longer). Remove contact lenses, if necessary and possible. Get medical attention by an eye specialist immediately. During washing, fully open the eyelid with fingers and wash in such a way as to let water reach every corner of the eyeball and eyelid.

If swallowed: Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Section 5. Firefighting Measures

Suitable extinguishing media

Small fire: Chemical powder extinguisher, alcohol resistant foam fire extinguishing media, carbon dioxide, or water spray.

Large fire: Alcohol resistant foam fire extinguishing media, water spray, or fog. **Unsuitable extinguishing media:** Direct straight streams may spread a fire.

Specific hazards arising from the chemical: Will be easily ignited by heat, sparks, or flames. Containers may explode when heated. Fire will produce irritating, corrosive, and/or toxic gases. May polymerize explosively when heated or involved in a fire. Vapor explosion hazard indoors, outdoors, or in sewers.

Special protective actions for fire-fighters: In case of firefighting, wear positive pressure self-contained breathing apparatus and chemical protective clothing. Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank. Structural firefighters' protective clothing will only provide limited protection. Keep upwind of fire. Use water spray at a large fire, when another fire extinguishing media may be inefficient. Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out. If impossible to use unmanned hose holders or monitor nozzles for massive fire, withdraw from area and let fire burn.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures: Promptly remove possible ignition sources from the vicinity. Use personal protection. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.



Environmental precautions: Do not flush to sewer or allow to enter waterways. This product has a strong bad smell and irritation. Therefore, take proper measures like informing the people in the neighboring area of the leakage occurrence. Surround this product with sandbags and earth/sand and cover it with an antistatic sheet to prevent diffusion of smell.

Methods and materials for containment and cleaning up: In the case of small amount, hydrolyze it with 5-10% sodium hydroxide solution, neutralize, and wash with water. The waste water should be properly treated (incineration). In the case of large amount, surround it with earth/sand, sandbags and others, cover it with oil-resistant antistatic sheet to prevent generation of vapor, and recover it into proper containers like drums. Then, treat it as in the case of small amount.

Section 7. Handling and Storage

Precautions for safe handling: During handling, be sure to wear proper protective equipment. This product can be charged with static electricity. Take countermeasures for static electricity removal (grounding, others). Wear antistatic clothes and antistatic shoes to prevent human body electrification. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not handle the containers harshly in such a way as to make them tumbled, dropped, given a shock, or dragged.

Conditions for safe storage, including any incompatibilities: Keep away from heat. Keep away from sources of ignition. - No smoking. Protect from sunlight. Store in a well-ventilated place. When storing this product in a tank, store it at as-low-as-possible temperature of 40°C or lower and control to keep the oxygen concentration of the gaseous phase at 7-21%. (Storing at oxygen concentration of lower than 7% can cause polymerization. Store in tightly closed stainless steel or polyethylene container.)

Section 8. Exposure Controls / Personal Protection

Control parameters

2-Hydroxypropyl Acrylate (inhibited) (CAS: 999-61-1) TWA: 0.5ppm (ACGIH)

Appropriate engineering controls: Install eye and body washing facilities near the handling place. Use closed equipment/machinery or use local ventilation equipment.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection: protective glasses, goggle, protective face shield

Skin protection: organic solvent impermeable protective gloves (antistatic ones are desirable)

Body protection: organic solvent impermeable protective clothes, protective shoes (antistatic ones are desirable)

Respiratory protection: gas mask

Section 9. Physical and Chemical Properties

Appearance/form (physical state, color, etc.): clear, colorless liquid

Odor: ester odor
Odor threshold: no data available
pH: 3.4 (20 °C 1 mol/L aqueous solution)
Melting point/freezing point: <=-60 °C
Initial boiling point and boiling range: 77 °C (0.6 kPa)
Flash point: 109 °C - open cup
Evaporation rate: no data available
Flammability (solid, gas): no data available
Upper/lower flammability limits: no data available
Upper/lower explosive limits: Lower Limit 1.8% (V)
Vapor pressure: 1.18 hPa (0.89 mmHg) at 20 °C (68 °F)
Vapor density: 4.5
Relative density: 1.0536 (20°C)
Solubility(ies): water very good
Partition coefficient n-octanol/water: 0.35
Auto-ignition temperature: no data available
Decomposition temperature: no data available
Viscosity: no data available
Explosive properties: no data available
Oxidizing properties: no data available

Section 10. Stability and Reactivity

Chemical stability: Even though polymerization inhibitor is added, heating, direct sunlight, peroxides, and iron rust can cause polymerization.

Possibility of hazardous reactions: When storing at low-oxygen condition of oxygen concentration of lower than 7% at the gaseous phase, polymerization can occur. **Conditions to avoid:** Heating, contact with incompatible substances, ignition sources **Incompatible materials:** strong oxidizing substances, peroxides

Section 11. Toxicological Information

Information on toxicological effects

Acute toxicity Oral

LD50: 570 mg/kg (male rat)

LD50: 510 mg/kg (female rat)

Skin corrosion/irritation: no corrosion, severely irritating

Germ cell mutagenicity: no known effect in humans or animals Carcinogenicity not a carcinogen

Reproductive toxicity: no known effect in humans or animals



Section 12. Ecological Information

Toxicity

Acute hazard (fish)

LC50(96hr): 3.1 mg/L (Pimephales promelas)

Persistence and degradability: readily biodegradable (BOD: 83%)

Bioaccumulative potential: not accumulated (log Kow = 0.35)

Section 13. Disposal Considerations

Waste Treatment Methods: Dispose of product and contaminated packaging in accordance with all local, state, and federal environmental control regulations.

Section 14. Transport Information

DOT (US)

UN Number: UN2922

Class: 8 (6.1)

Packing Group: II

Proper Shipping Name: CORROSIVE LIQUID, TOXIC, N.O.S. (2-HYDROXYPROPYL ACRYLATE)

Marine pollutant: Not applicable

Special precautions: Transport the material in accordance with regulations in your country or region. At the time of discharge from tank truck, be sure to ground to prevent static electricity charge and to completely empty the remaining liquid in the pipes. Load the containers in such a way as not to fall down, tumble, or be damaged over the loaded cargo to prevent direct sunlight.

Section 15. Regulatory Information

Safety, health and environmental regulations specific for the product in question

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: Hydroxypropyl acrylate, mixture of isomers CAS-No. 25584-83-2

New Jersey Right To Know Components: Hydroxypropyl acrylate, mixture of isomers CAS-No. 25584-83-2

California Prop. 65 Components: This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.



HMIS Rating

Health: 3

Flammability: 1

Physical hazard: 0

NFPA Rating

Health: 3

Flammability: 1

Reactivity: 0

Section 16. Other Information

Disclaimer: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.

REVISION DATE: 10/11/2017

