

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

Section 11: Toxicological Information

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:
Microorganisms:
Chronic toxicity to aquatic
invertebrates:

Toxic. Chlorella vulgaris (Fresh water algae) 72 h LC50 = 1.53 mg/l
Activated sludge 72 h EC10 (Respiration inhibition of activated sludge) >100 mg/l
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**Pennsylvania Right To Know Components**

Caprolactone acrylate

CAS No.
110489-05-9**New Jersey Right To Know Components**

2-Propenoic acid, 2-hydroxyethyl ester

CAS No.
818-61-1**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 |

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