Section 1 – Company Information

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 - Parchem CCN# M1S0007152
Toll Free US & Canada: (800)255-3924
All other Origins: (813) 248-0585
Collect Calls Accepted

Section 2 – Product Identification/ Information on Ingredients

PRODUCT NAME: 2-Ethylhexyl Acrylate
CAS NUMBER: 103-11-7
SYNONYM: 2-Propenoic Acid, 2-Ethylhexyl Ester
FORMULA: C₁₁H₂₀O₂

<table>
<thead>
<tr>
<th>PRODUCT</th>
<th>CAS NUMBER</th>
<th>% BY WEIGHT</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Ethylhexyl Acrylate</td>
<td>103-11-7</td>
<td>≥ 99.3%</td>
</tr>
<tr>
<td>Monomethyl Ether of Hydroquinone</td>
<td>150-76-5</td>
<td>0.001 – 0.022%</td>
</tr>
</tbody>
</table>

Section 3 – Hazards Identification

DANGER!
Combustible liquid and vapor.
Causes respiratory tract, digestive tract, skin, and eye irritation.
May cause allergic skin reaction.
Lachrymator.
May polymerize violently or explosively if contaminated or overheated.

GHS Classification
Flammable liquids (Category 4)
Acute toxicity, Oral (Category 5)
Skin irritation (Category 2)
Serious eye damage (Category 1)
Skin sensitization (Category 1)
Specific target organ toxicity - single exposure (Category 3)
Acute aquatic toxicity (Category 3)

Signal Word: Danger!
Hazard Statement(s)
H227 Combustible liquid
H303 May be harmful if swallowed.
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)
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P280 Wear protective gloves/ eye protection/ face protection.
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

CERCLA Ratings (Scale 0-3)
Health: 2
Fire: 2
Reactivity: 2
Persistence: 0

NFPA Ratings (Scale 0-4)
Health: 2
Fire: 2
Reactivity: 2

HMIS Ratings (Scale 0-4)
Health: 2
Fire: 2
Reactivity: 2
PPE: G

Exposure Limits
2-Ethylhexyl Acrylate: 5 ppm
Monomethyl Ether of Hydroquinone: 5 mg/m³

Routes of Entry: Inhalation, skin, and ingestion

Effects of Overexposure
Acute
Eye: Severe irritation; damage reversible.
Skin: Causes irritation;
Inhalation: Irritation of the respiratory tract. Can cause drowsiness and headaches. May cause accumulation of fluid in lungs. Symptoms can be delayed for several hours.
Ingestion: Can severely irritate the mouth, throat and stomach. Can cause dizziness, severe difficulty in breathing and nervousness.
**Chronic:** Overexposure may cause irritation of respiratory tract. Local irritation at the site of exposure. Allergic reaction and local irritation of the skin.

**Medical Conditions Aggravated by Exposure:** Significant exposure to this chemical may adversely affect people with chronic disease of the respiratory system. Skin contact may aggravate an existing dermatitis.

### Section 4 – First Aid Measures

**Inhalation:** Remove from exposure to fresh air, restore breathing. Keep warm and quiet. Notify physician.

**Eyes (Splash):** Immediately flush eyes with water for 15 minutes holding eyelids open to irrigate. Take to a physician.

**Skin (Splash):** Wash affected area with soap and water. Remove contaminated clothing. Consult a physician if irritation persists.

**Ingestion:** Patient should drink large quantities of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Consult a physician or poison control center, treat symptomatically.

**Note to Physician:** Observe for latent pulmonary edema.

### Section 5 – Fire Fighting Measures

**Flash Point (Closed Cup):** 174°F

**Auto-Ignition Temp:** 496°F

**UEL:** 6.4%

**LEL:** 0.8%

**Extinguishing Media:** Foam, CO₂, dry chemical, water-fog

**Conditions of Flammability:** Flammable in the presence of a source of ignition when the temperature is above the flash point.

**Special Fire Fighting Procedures:** Shut off source. Water-fog may be used to cool closed containers to prevent pressure build up and possible auto ignition or explosion when exposed to extreme heat. Wear NIOSH approved self-contained breathing apparatus with full face-piece and pressure demand and full bunker gear for exposure to vapors or products of combustion and in confined spaces.

**Unusual Fire and Explosion Hazards:** Keep containers tightly closed. Combustible Liquid; isolate from all sources of ignition. Rapid, uncontrolled polymerization can cause explosion. Material creates a special hazard because it floats on water.

**Combustion Products:** Highly dependent on combustion conditions. A complex mixture of airborne solids, liquids, and gases including carbon monoxide, carbon dioxide, carbon oxides and other unidentified organic compounds evolve when this material undergoes combustion.
Section 6 – Accidental Release Measures

**Protective Measures:** Combustible liquid; Eliminate ignition sources in the vicinity of the spill or released vapor. Immediately evacuate all nonessential people. Verify that responders are properly trained and wearing appropriate respiratory equipment and fire resistant protective clothing during cleanup operations.

**Spill Management:** Use explosion proof equipment. Shut off valves, contain spill, and keep out of water sources and sewers. For smaller spills, add non-flammable absorbent such as clay or silica in spill area. If an odor or acidity problem exists, add lime or sodium bicarbonate. For large spills use foam on spill to minimize vapors clean up by vacuuming then using non-flammable absorbent. Remove contaminated soil to remove contaminated trace residues. Place all saturated absorbent, using non-sparking tools, in an approved container for disposal. Flush with water to remove trace residue. Minimize breathing vapors and skin contact, ventilate confined areas, open all windows and doors, assure conformity with applicable government regulations. Keep all nonessential people away.

Section 7 – Handling & Storage

**General Handling Information:** Avoid work practices that may release volatile components in the atmosphere. Avoid contaminating soil or releasing material into sewage and drainage systems. Use non-sparking tools to open or close containers

**Storage:** Store in closed containers away from direct sunlight. Do not store above 100°F. Store large quantities only in buildings designed to comply with OSHA 1910.106. Avoid storage under an oxygen free atmosphere. This product should never be stored under an inert gas atmosphere, but should always be stored under an atmosphere containing 5 to 21% vol. oxygen. Keep containers tight and upright to prevent leakage. Do not store with incompatible materials. Keep containers closed when not in use. Do not take internally. Avoid prolonged or repeated contact with skin, eyes, and clothing.

**Container Warnings:** Containers should be Bonded and Grounded when pouring. Avoid free fall of liquid in excess of a few inches. Empty containers release residue and can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, or expose such containers to heat, sparks, static electricity or other sources of ignition. Do not attempt to clean. "Empty" drums should be completely drained, properly bunged and promptly returned to a drum re-conditioner. Avoid breathing vapors in top of shipping container. Use with adequate ventilation.

Section 8 – Exposure Controls & Personal Protection

**Respiratory Protection:** For vapor concentrations 1 to 10 times OSHA TLV or PEL an air supplied NIOSH/MSHA approved respirator with full face-piece and organic vapor cartridges. For concentrations over 10 times OSHA TLV or PEL and in confined areas use an approved positive pressure full face-piece supplied air respirator.
**Ventilation:** Provide general dilution or local exhaust ventilation in volume and pattern to keep concentrations within permitted exposure limits. All areas should be ventilated in accordance with OSHA Regulation 29 CFR Part 1910.

**Protective Gloves:** Butyl Rubber or neoprene chemical resistant gloves.

**Eye Protection:** Use safety eyewear with splash guards or face shield.

**Other Protective Clothing or Equipment:** Use chemical resistant apron or other impervious clothing. Remove and wash contaminated clothing before reuse. Shower and eyewash should be easily accessible to the work area.

---

### Section 9 – Physical & Chemical Properties

**Appearance:** Colorless mobile liquid  
**Odor:** Strong acid musty odor  
**Odor Threshold:** 16 ppb  
**Boiling Range:** 416°F  
**Solubility in Water (20°C):** < 0.01%  
**Vapor Density (Air=1):** 6.35  
**Evaporation Rate (Butyl Acetate=1):** < 0.02  
**Vapor Pressure (20°C):** 0.14 mmHg  
**Specific Gravity (25°C):** 0.885  
**Freezing Point:** -130°F  
**Viscosity (20°C):** 1.54 cps  
**Molecular Weight:** 184.16 g/mol

---

### Section 10 – Stability & Reactivity Data

**Stability:** Stable  
The stability of the product depends upon the availability of both dissolved oxygen and MEHQ inhibitor. The presence of oxygen is necessary for the MEHQ to function effectively.

**Conditions to Avoid:** Avoid storage at product temperatures above 100°F. Avoid sunlight, x-ray, or ultra violet radiation. Also avoid heat, sparks, pilot lights, static electricity, and open flame.

**Hazardous Polymerization:** Can occur. Uncontrolled polymerization can cause rapid evolution of heat and increased pressure which can result in violent rupture of storage vessels or containers. The effectiveness of the inhibitor is dependent on the presence of oxygen.

**Incompatibility (Materials to Avoid):** Strong oxidants such as liquid chlorine, oxygen, sodium hypochlorite, inorganic acids e.g. Peroxides, t-butyl peroxide, and hydrogen peroxide.

**Hazardous Decomposition Products:** Fumes, Smoke, Carbon Monoxide, Aldehydes, and other decomposition products where combustion is not complete.

**Hazardous Polymerization:** May occur
Section 11 – Toxicological Information

The effects of overexposure are based on acute toxicity profiles. Typical values are as follows.

**Ingredient:** 2-Ethylhexyl Acrylate  
**Oral LD50 (Rat):** 4.4 - 12.8g/kg  
**Skin LD50 (Rabbit):** 7.4 - 16g/kg

**Carcinogenicity:** Carcinogenic in mice (STRAIN C3H) exposed 3 times/week for their life-span by dermal application to 2EH Acrylate in Acetone at concentrations of 21% and above. Tumors developed only at the site of contact and only in the presence of continuous lifetime irritation of the skin.  
**IARC:** 3 - Group 3: Not classifiable as to its carcinogenicity to humans (2-Ethylhexyl acrylate)  
**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, or OSHA.

**Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System):**  
May cause respiratory irritation.

**Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System):** No data available

Section 12 – Ecological Information

**LC50 72-hour Fish (goldfish):** 200ppm  
**LC50 48-hour Fish (golden ide):** 23ppm  
**EC50 48-hour Water Flea (Daphnia magna):** 17.45ppm  
**EC50 - Desmodesmus subspicatus (green algae):** 44 mg/L - 72 h

**Environmental Fate:** In the respirometric test for ready biodegradability using an activated sludge inoculum, 75% degradation was reported after 15 days.  
**Bioaccumulation:** The log octanol/water partition coefficient is 3.67. This suggests that 2EH Acrylate has some potential to bioaccumulate.

Section 13 – Disposal Consideration

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

Section 14 – Transportation Data

**DOT Shipping Name:** Aviation regulated liquid, n.o.s. (2-Ethylhexyl acrylate)  
**DOT Hazard Classification:** 9  
**DOT Label Codes:** 9  
**DOT ID Number:** UN3334  
**DOT Package Code:** III
Section 15 – Regulatory Information

(RQ) Reportable Quantity: None CERCLA
Sara 302 - No
Sara 313 - No

Sara Section 311 List Hazards
Immediate Acute Health: Yes
Delayed Chronic Health: No
Fire: Yes
Reactive: Yes
Sudden Release of Pressure: No

Massachusetts Right to Know Components: 2-Ethylhexyl acrylate; CAS-No. 103-11-7
Pennsylvania Right to Know Components: 2-Ethylhexyl acrylate; CAS-No. 103-11-7
New Jersey Right to Know Components: 2-Ethylhexyl acrylate; CAS-No. 103-11-7
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.

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.