## 2-ETHYLHEXYL ACRYLATE

### 1. CORRECTIVE RESPONSE ACTIONS

1. **Ship discharge**
   - Contain Collection Systems: Slime
   - Chemical and Physical Treatment: Burn; Absorb
   - Clean shore line
   - Salvage waterfowl

2. **Release on Water**
   - Notify local health and wildlife officials.
   - Notify operators or nearby water intake agencies.

### 2. CHEMICAL DESIGNATIONS

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<td>CAUTIONARY RESPONSE INFORMATION</td>
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<td><a href="#">Common Synonyms</a></td>
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<td>Acrylic acid, 2-ethylhexyl ester</td>
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<td>2-Ethylhexyl-2-propionate</td>
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<td><strong>Liquid</strong></td>
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<td>Floats on water.</td>
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### 3. HEALTH HAZARDS

#### 3.1 Personal Protective Equipment
- Self-contained breathing apparatus; rubber gloves; vapor-proof chemical safety goggles; impervious apron and boots.

#### 3.2 Symptoms Following Exposure
- Inhalation of concentrated vapor causes drowsiness and convulsions.
- Liquid causes irritation of eyes and may irritate skin on prolonged exposure.

#### 3.3 Treatment of Exposure
- **INHALATION:** give artificial respiration and oxygen if necessary; call a physician. EYES: immediately flush with plenty of water for at least 15 min.; get medical attention. SKIN: immediately flush with plenty of water for at least 15 min. INGESTION: induce vomiting and consult a physician.

#### 3.4 TLV-TWA
- Not listed.

#### 3.5 TLV-STEL
- Not listed.

#### 3.6 Toxicity by Ingestion
- Grade 2; oral rat LD50 = 1,540 mg/kg

#### 3.7 Toxicity by Inhalation
- Currently not available.

#### 3.8 Chronic Toxicity
- Currently not available.

#### 3.9 Irritant Characteristics
- Currently not available.

#### 3.10 Vapor (Gas) Irritant Characteristics
- Vapors are nonirritating to eyes and throat.

#### 3.11 Liquid or Solid Characteristics
- Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of the skin.

### 4. FIRE HAZARDS

#### 4.1 Flash Point
- 195°F O.C.

#### 4.2 Flammable Limits in Air
- 0.8%-6.4% (lower limit)

#### 4.3 Fire Extinguishing Agents
- Dry chemical or carbon dioxide

#### 4.4 Fire Extinguishing Agent Not to Be Used
- Water or foam may cause frothing.

#### 4.5 Special Hazards of Combustion
- Products: Not pertinent

#### 4.6 Behavior in Fire
- Combustible.

#### 4.7 Auto Ignition Temperature
- 496°F

#### 4.8 Electrical Hazards
- Currently not available.

#### 4.9 Burning Rate
- 4.6 mm/min.

#### 4.10 Flashpoint
- 214°C = 487°K

#### 4.11 Stoichiometric Air to Fuel Ratio
- 71.4

#### 4.12 Flame Temperature
- Currently not available

#### 4.13 Combustion Molar Ratio
- Reactant to Product: 21.0 (calc.)

#### 4.14 Minimum Oxygen Concentration
- For Combustion (MOC): Not listed

### 5. CHEMICAL REACTIVITY

#### 5.1 Reactivity with Water
- No reaction

#### 5.2 Reactivity with Common Materials
- No reaction

#### 5.3 Stability During Transport
- Stable

#### 5.4 Neutralizing Agents for Acids and Caustics
- Not pertinent

#### 5.5 Polymerization
- Will polymerize in the presence of an initiator.

#### 5.6 Stability (Monomers)
- Ether of hydroxypropene: 13-120 ppm.
- Hydroquinone: 90-120 ppm.

### 6. WATER POLLUTION

#### 6.1 Aquatic Toxicity
- 75 ppm/24 hr for brine shrimp/TL

#### 6.2 Waterfowl Toxicity
- Currently not available

#### 6.3 Biological Oxygen Demand (BOD)
- 9% of theoretical in 5 days, fresh water, acclimated seed

#### 6.4 Food Chain Concentration Potential
- None

#### 6.5 GESAMP Hazard Profile
- Bioaccumulation: 0
- Damage to living resources: 3
- Human Oral hazard: 0
- Human Contact hazard: 1
- Reduction of amenities: X

### 7. SHIPPING INFORMATION

#### 7.1 Grades of Purity
- 99+% (99.5+)

#### 7.2 Storage Temperature
- <100°F (38°C)

#### 7.3 Inert Atmosphere
- No requirement

#### 7.4 Ventilation
- Open (flame arrestor)

#### 7.5 IMO Pollution Category
- B

#### 7.6 Ship Type
- 3

#### 7.7 Barge Hull Type
- 3

### 8. HAZARD CLASSIFICATIONS

#### 8.1 49 CFR Category
- Not listed.

#### 8.2 49 CFR Class
- Not pertinent

#### 8.3 49 CFR Package Group
- Not listed.

#### 8.4 Marine Pollutant
- Not pertinent

#### 8.5 NFPA Hazard Classification
- Not pertinent.

### 9. PHYSICAL & CHEMICAL PROPERTIES

#### 9.1 Physical State at 15°C and 1 atm
- Liquid

#### 9.2 Molecular Weight
- 184.2

#### 9.3 Boiling Point at 1 atm
- 21.0°F = -6.4°C

#### 9.4 Freezing Point
- -130°F = -90°C = 183 K

#### 9.5 Critical Temperature
- Not pertinent

#### 9.6 Critical Pressure
- Not pertinent

#### 9.7 Specific Gravity
- 0.885 at 20°C (liquid)

#### 9.8 Liquid Surface Tension
- (est.) 26 dynes/cm

#### 9.9 Liquid Water Interfacial Tension
- (est.) 30 dynes/cm

#### 9.10 Vapor (Gas) Specific Gravity
- Not pertinent

#### 9.11 Ratio of Specific Heats of Vapor (Gas)
- Not pertinent

#### 9.12 Latent Heat of Vaporization
- 110 Btu/lb = 61 cal/g = 2.6 X 10^4 J/kg

#### 9.13 Heat of Combustion
- -15,500 Btu/lb = -6,400 cal/g = 360 X 10^4 J/kg

#### 9.14 Heat of Decomposition
- Not pertinent

#### 9.15 Heat of Solution
- Not pertinent

#### 9.16 Heat of Polymerization
- -142 Btu/lb = -79 cal/g = -3.3 X 10^4 J/kg

#### 9.17 Heat of Fusion
- Currently not available

#### 9.18 Limiting Values
- Currently not available

#### 9.19 Reid Vapor Pressure
- 0.01 psi

### NOTES

- **EAI**

**JUNE 1999**
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