

# N-DECYL ACRYLATE

DAR

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Acrylic acid, decyl ester Decyl acrylate Decyl acrylate, inhibited 2-Propenoic acid, decyl ester	Liquid  Floats on water.
<p>Keep people away. Avoid contact with liquid and vapor. Avoid inhalation. Wear self-contained positive pressure breathing apparatus and full protective clothing. Shut off ignition sources. Call fire department. Evacuate area in case of large spill. Notify local health and pollution control agencies.</p>	
<b>Fire</b>	<p>Combustible. POISONOUS GASES ARE PRODUCED IN FIRES. Container may explode in fire. Vapor may explode if ignited in an enclosed area. Fight fires from safe distance or protected location. Extinguish small fires: dry chemicals, CO<sub>2</sub>, water spray or foam; large fires: water spray, fog or foam. Water or foam may cause frothing. Cool exposed containers with water.</p>
<b>Exposure</b>	<p>CALL FOR MEDICAL AID.</p> <p>LIQUID Irritating to skin and eyes. Harmful if swallowed. IF IN EYES OR ON SKIN: flush with running water for at least 15 min.; hold eyelids open if necessary. Wash skin with soap and water. Remove and isolate contaminated clothing and shoes at the site. IF SWALLOWED and victim is CONSCIOUS, have victim drink several glasses of water and induce vomiting. IF SWALLOWED and victim is UNCONSCIOUS or HAVING CONVULSIONS, do nothing except keep victim warm.</p>
<b>Water Pollution</b>	<p>Effect of low concentrations on aquatic life is unknown. May be dangerous if it enters water intakes. Fouling to shoreline. Notify local health and wildlife officials. Notify operators of nearby water intakes.</p>

### 1. CORRECTIVE RESPONSE ACTIONS

Stop discharge

### 2. CHEMICAL DESIGNATIONS

- 2.1 CG Compatibility Group: 14; Acrylates
- 2.2 Formula: CH<sub>2</sub>(CH<sub>2</sub>)<sub>9</sub>COCH=CH<sub>2</sub>
- 2.3 IMO/UN Designation: Not listed
- 2.4 DOT ID No.: Not listed
- 2.5 CAS Registry No.: 2158-96-9
- 2.6 NAERG Guide No.: Not listed
- 2.7 Standard Industrial Trade Classification: 51377

### 3. HEALTH HAZARDS

- 3.1 Personal Protective Equipment: Wear self-contained positive pressure breathing apparatus and full protective clothing.
- 3.2 Symptoms Following Exposure: INHALATION: Higher concentrations may cause pronounced pulmonary irritation or edema. Prolonged contact may cause severe damage to tissues. May be fatal if swallowed or absorbed through skin.
- 3.3 Treatment of Exposure: INHALATION: Move victim to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen. EYES OR SKIN: immediately flush with running water for at least 15 min.; hold eyelids open if necessary. Wash skin with soap and water. INGESTION: if conscious, give victim several glasses of water and induce vomiting. If unconscious or having convulsions, do nothing except keep victim warm.
- 3.4 TLV-TWA: Not listed.
- 3.5 TLV-STEL: Not listed.
- 3.6 TLV-Ceiling: Not listed.
- 3.7 Toxicity by Ingestion: Grade 1; LD<sub>50</sub> = 6.46 g/kg (rat)
- 3.8 Toxicity by Inhalation: Currently not available.
- 3.9 Chronic Toxicity: Currently not available
- 3.10 Vapor (Gas) Irritant Characteristics: Currently not available
- 3.11 Liquid or Solid Characteristics: Severe skin irritant.
- 3.12 Odor Threshold: Currently not available
- 3.13 IDLH Value: Not listed.
- 3.14 OSHA PEL-TWA: Not listed.
- 3.15 OSHA PEL-STEL: Not listed.
- 3.16 OSHA PEL-Ceiling: Not listed.
- 3.17 EPA AEGL: Not listed

### 4. FIRE HAZARDS

- 4.1 Flash Point: 260°F O.C.
- 4.2 Flammable Limits in Air: Currently not available
- 4.3 Fire Extinguishing Agents: Small fires: dry chemical, CO<sub>2</sub>, water spray or foam; large fires: water spray, fog or foam.
- 4.4 Fire Extinguishing Agents Not to Be Used: Not pertinent
- 4.5 Special Hazards of Combustion Products: May contain acid smoke and fumes including toxic acrylic acid, one of the most serious eye injury chemicals and a severe skin irritant.
- 4.6 Behavior in Fire: It may decompose to yield acid smoke and fumes.
- 4.7 Auto Ignition Temperature: Currently not available
- 4.8 Electrical Hazards: Not applicable
- 4.9 Burning Rate: Currently not available
- 4.10 Adiabatic Flame Temperature: Currently not available
- 4.11 Stoichiometric Air to Fuel Ratio: 85.7 (calc.)
- 4.12 Flame Temperature: Currently not available
- 4.13 Combustion Molar Ratio (Reactant to Product): 25.0 (calc.)
- 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed

### 5. CHEMICAL REACTIVITY

- 5.1 Reactivity with Water: No reaction.
- 5.2 Reactivity with Common Materials: Avoid contact with copper, copper alloys, zinc, galvanized steel, alloys having more than 10 percent zinc by weight, strong oxidizing agents and polymerization initiators.
- 5.3 Stability During Transport: STABLE. Avoid heat, light and polymerization initiators.
- 5.4 Neutralizing Agents for Acids and Caustics: Not appl
- 5.5 Polymerization: Will polymerize unless inhibited. Inhibited material may polymerize if heated, if cooled so that the inhibitor crystallizes, if stored in an oxygen-free atmosphere, or if stored in contact with copper and copper alloys, zinc and zinc alloys with more than 10% zinc, and galvanized steel. Strong oxidizers and other contaminants may also initiate this reaction.
- 5.6 Inhibitor of Polymerization: Currently not available

### 6. WATER POLLUTION

- 6.1 Aquatic Toxicity: Currently not available
- 6.2 Waterfowl Toxicity: Currently not available
- 6.3 Biological Oxygen Demand (BOD): Currently not available
- 6.4 Food Chain Concentration Potential: Currently not available
- 6.5 GESAMP Hazard Profile:  
Bioaccumulation: 0  
Damage to living resources: 4  
Human Oral hazard: 1  
Human Contact hazard: 1  
Reduction of amenities: X

### 7. SHIPPING INFORMATION

- 7.1 Grades of Purity: Currently not available
- 7.2 Storage Temperature: Ambient
- 7.3 Inert Atmosphere: No requirement
- 7.4 Venting: Open
- 7.5 IMO Pollution Category: A
- 7.6 Ship Type: 2
- 7.7 Barge Hull Type: Currently not available

### 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: No
- 8.5 NFPA Hazard Classification:  

Category	Classification
Health Hazard (Blue)	2
Flammability (Red)	1
Instability (Yellow)	0
- 8.6 EPA Reportable Quantity: Not listed.
- 8.7 EPA Pollution Category: Not listed.
- 8.8 RCRA Waste Number: Not listed
- 8.9 EPA FWPCA List: Not listed

### 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 Physical State at 15° C and 1 atm: Liquid
- 9.2 Molecular Weight: 212.37
- 9.3 Boiling Point at 1 atm: 473°F = 263°C = 536°K (est.)
- 9.4 Freezing Point: <32°F = <0°C = <273°K
- 9.5 Critical Temperature: Currently not available
- 9.6 Critical Pressure: Currently not available
- 9.7 Specific Gravity: 0.8781 at 20°C
- 9.8 Liquid Surface Tension: Currently not available
- 9.9 Liquid Water Interfacial Tension: Currently not available
- 9.10 Vapor (Gas) Specific Gravity: 7.3 (est.)
- 9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available
- 9.12 Latent Heat of Vaporization: Currently not available
- 9.13 Heat of Combustion: Currently not available
- 9.14 Heat of Decomposition: Not pertinent
- 9.15 Heat of Solution: Not pertinent
- 9.16 Heat of Polymerization: Currently not available
- 9.17 Heat of Fusion: Currently not available
- 9.18 Limiting Value: Currently not available
- 9.19 Reid Vapor Pressure: Currently not available

### NOTES

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9.20 SATURATED LIQUID DENSITY		9.21 LIQUID HEAT CAPACITY		9.22 LIQUID THERMAL CONDUCTIVITY		9.23 LIQUID VISCOSITY	
Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F	Temperature (degrees F)	British thermal unit inch per hour-square foot-F	Temperature (degrees F)	Centipoise
68	54.810		C U R R E N T L Y  N O T  A V A I L A B L E		C U R R E N T L Y  N O T  A V A I L A B L E		C U R R E N T L Y  N O T  A V A I L A B L E

9.24 SOLUBILITY IN WATER		9.25 SATURATED VAPOR PRESSURE		9.26 SATURATED VAPOR DENSITY		9.27 IDEAL GAS HEAT CAPACITY	
Temperature (degrees F)	Pounds per 100 pounds of water	Temperature (degrees F)	Pounds per square inch	Temperature (degrees F)	Pounds per cubic foot	Temperature (degrees F)	British thermal unit per pound-F
	I N S O L U B L E		C U R R E N T L Y  N O T  A V A I L A B L E		C U R R E N T L Y  N O T  A V A I L A B L E		C U R R E N T L Y  N O T  A V A I L A B L E