

# DODECYLBENZENESULFONIC ACID, CALCIUM SALT

DCS

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Calcium alkylaromatic sulfonate Calcium alkylbenzenesulfonate		Liquid	Yellowish-brown	Solvent odor
May float or sink in water.				
<p>Keep people away. Avoid contact with liquid.                  Shut off ignition sources. Call fire department.                  Notify local health and pollution control agencies.                  Protect water intakes.</p>				
<b>Fire</b>	<p><b>FLAMMABLE.</b>                  Containers may explode in fire.                  Flashback along vapor trail may occur.                  Vapor may explode if ignited in an enclosed area.                  Extinguish with dry chemicals, foam or carbon dioxide.                  Water may be ineffective on fire.                  Cool exposed containers with water.</p>			
<b>Exposure</b>	<p>CALL FOR MEDICAL AID.</p> <p><b>LIQUID</b>                  Irritating to skin and eyes.                  If swallowed will cause nausea.                  Remove contaminated clothing and shoes.                  Flush affected areas with plenty of water.                  IF IN EYES, hold eyelids open and flush with plenty of water.                  IF SWALLOWED and victim is UNCONSCIOUS, have victim drink water or milk.                  IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.                  DO NOT INDUCE VOMITING.</p>			
<b>Water Pollution</b>	<p>Effect of low concentrations on aquatic life is unknown.                  Fouling to shoreline.                  May be dangerous if it enters water intakes.                  Notify local health and wildlife officials.                  Notify operators of nearby water intakes.</p>			

<p><b>1. CORRECTIVE RESPONSE ACTIONS</b>                  Stop discharge                  Contain                  Collection Systems: Skim; Pump                  Chemical and Physical Treatment:                  Absorb                  Do not burn                  Clean shore line                  Salvage waterfowl</p>	<p><b>2. CHEMICAL DESIGNATIONS</b>                  2.1 CG Compatibility Group: Not listed.                  2.2 Formula: (C<sub>12</sub>H<sub>25</sub>SO<sub>2</sub>)<sub>2</sub>Ca-solvent                  2.3 IMO/UN Designation: Not listed                  2.4 DOT ID No.: Not listed.                  2.5 CAS Registry No.: 27176-87-0                  2.6 NAERG Guide No.: Not listed                  2.7 Standard Industrial Trade Classification: 51549</p>
<p><b>3. HEALTH HAZARDS</b>                  3.1 Personal Protective Equipment: Goggles or face shield; rubber gloves                  3.2 Symptoms Following Exposure: Ingestion causes irritation of mouth and stomach. Contact with eyes causes irritation. Has a drying effect on skin; prolonged contact may cause irritation.                  3.3 Treatment of Exposure: INGESTION: give large amount of water; do NOT induce vomiting. EYES: flush with water for at least 15 min. SKIN: wipe off, flush with water.                  3.4 TLV-TWA: Not listed.                  3.5 TLV-STEL: Not listed.                  3.6 TLV-Ceiling: Not listed.                  3.7 Toxicity by Ingestion: Currently not available                  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: Currently not available                  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</p>	

<p><b>4. FIRE HAZARDS</b>                  4.1 Flash Point: &lt;100°F C.C.                  4.2 Flammable Limits in Air: Currently not available                  4.3 Fire Extinguishing Agents: Dry chemical, foam, carbon dioxide                  4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective.                  4.5 Special Hazards of Combustion Products: Currently not available                  4.6 Behavior in Fire: Currently not available                  4.7 Auto Ignition Temperature: Currently not available                  4.8 Electrical Hazards: Currently not available                  4.9 Burning Rate: About 4 mm/min                  4.10 Adiabatic Flame Temperature: Currently not available                  4.11 Stoichiometric Air to Fuel Ratio: Not pertinent                  4.12 Flame Temperature: Currently not available                  4.13 Combustion Molar Ratio (Reactant to Product): Not pertinent                  4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed</p>	<p><b>7. SHIPPING INFORMATION</b>                  7.1 Grades of Purity: 59-67%; remainder is a hydrocarbon solvent that is combustible or flammable.                  7.2 Storage Temperature: Ambient                  7.3 Inert Atmosphere: No requirement                  7.4 Venting: Open (flame arrester)                  7.5 IMO Pollution Category: Currently not available                  7.6 Ship Type: Currently not available                  7.7 Barge Hull Type: Currently not available</p>
<p><b>5. CHEMICAL REACTIVITY</b>                  5.1 Reactivity with Water: No reaction                  5.2 Reactivity with Common Materials: Currently not available                  5.3 Stability During Transport: Solid                  5.4 Neutralizing Agents for Acids and Caustics: Not pertinent                  5.5 Polymerization: Not pertinent                  5.6 Inhibitor of Polymerization: Not pertinent</p>	<p><b>8. HAZARD CLASSIFICATIONS</b>                  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: Not listed                  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</p>
<p><b>6. WATER POLLUTION</b>                  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: None                  6.5 GESAMP Hazard Profile:                  Bioaccumulation: 0                  Damage to living resources: 3                  Human Oral hazard: 1                  Human Contact hazard: 1                  Reduction of amenities: X</p>	<p><b>9. PHYSICAL &amp; CHEMICAL PROPERTIES</b>                  9.1 Physical State at 15° C and 1 atm: Liquid                  9.2 Molecular Weight: Not pertinent                  9.3 Boiling Point at 1 atm: Not pertinent                  9.4 Freezing Point: Not pertinent                  9.5 Critical Temperature: Not pertinent                  9.6 Critical Pressure: Not pertinent                  9.7 Specific Gravity: 1.04 at 25°C (liquid solution) 0.9 at 25°C (solvent)                  9.8 Liquid Surface Tension: Currently not available                  9.9 Liquid Water Interfacial Tension: Currently not available                  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: Not pertinent                  9.13 Heat of Combustion: Not pertinent                  9.14 Heat of Decomposition: Not pertinent                  9.15 Heat of Solution: Not pertinent                  9.16 Heat of Polymerization: Not pertinent                  9.17 Heat of Fusion: Currently not available                  9.18 Limiting Value: Currently not available                  9.19 Reid Vapor Pressure: Currently not available</p>
<p>NOTES</p>	

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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
77	64.919		N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T

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 I L E		N O T  P E R T I N E N T		N O T  P E R T I N E N T		N O T  P E R T I N E N T