

DIISOPROPYLBENZENE (ALL ISOMERS)

DIX

CAUTIONARY RESPONSE INFORMATION				4. FIRE HAZARDS	7. SHIPPING INFORMATION								
Common Synonyms Benzene, diisopropyl Cumene bottoms DIPB bis-(1-Methylethyl)-benzene	Liquid	Clear amber	Sharp penetrating and aromatic	<p>4.1 Flash Point: 170°F C.C.</p> <p>4.2 Flammable Limits in Air: LEL= 0.9%, UEL= 6.5%</p> <p>4.3 Fire Extinguishing Agents: Water spray, carbon dioxide, dry chemical, alcohol foam.</p> <p>4.4 Fire Extinguishing Agents Not to Be Used: Water may be ineffective.</p> <p>4.5 Special Hazards of Combustion Products: Vapors may travel considerable distance to an ignition source and flash back.</p> <p>4.6 Behavior in Fire: Currently not available</p> <p>4.7 Auto Ignition Temperature: 840°F</p> <p>4.8 Electrical Hazards: Currently not available</p> <p>4.9 Burning Rate: Currently not available</p> <p>4.10 Adiabatic Flame Temperature: Currently not available</p> <p>4.11 Stoichiometric Air to Fuel Ratio: 78.5 (calc.)</p> <p>4.12 Flame Temperature: Currently not available</p> <p>4.13 Combustion Molar Ratio (Reactant to Product): 21.0 (calc.)</p> <p>4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed</p>	<p>7.1 Grades of Purity: Currently not available</p> <p>7.2 Storage Temperature: Ambient.</p> <p>7.3 Inert Atmosphere: Currently not available</p> <p>7.4 Venting: Explosion proof type exhaust. Keep vapors below 100 PPM.</p> <p>7.5 IMO Pollution Category: A</p> <p>7.6 Ship Type: 2</p> <p>7.7 Barge Hull Type: Currently not available</p>								
Keep people away. Avoid contact with liquid and vapor. Avoid inhalation. Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves). Shut off ignition sources and call fire department. Stay upwind and use water spray to "knock down" vapor. Notify local health and pollution control agencies. Protect water intakes.				8. HAZARD CLASSIFICATIONS									
<p>Fire Combustible. Water may be ineffective on fire. Wear goggles, self-contained breathing apparatus, and rubber overclothing (including gloves). Extinguish with dry chemical, alcohol foam, or CO₂. Cool exposed containers with water.</p> <p>Exposure CALL FOR MEDICAL AID.</p> <p>VAPOR Irritating to eyes, nose and throat. If inhaled, will cause dizziness or difficult breathing. Move to fresh air. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.</p> <p>LIQUID Will burn skin and eyes. Harmful if swallowed. 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, DO NOT INDUCE VOMITING.</p> <p>Water Pollution Effect of low concentrations on aquatic life is not known. 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>8.1 49 CFR Category: Forbidden</p> <p>8.2 49 CFR Class: Not pertinent</p> <p>8.3 49 CFR Package Group: Not pertinent.</p> <p>8.4 Marine Pollutant: Yes</p> <p>8.5 NFPA Hazard Classification:</p> <table> <thead> <tr> <th>Category</th> <th>Classification</th> </tr> </thead> <tbody> <tr> <td>Health Hazard (Blue)</td> <td>0</td> </tr> <tr> <td>Flammability (Red)</td> <td>2</td> </tr> <tr> <td>Instability (Yellow)</td> <td>0</td> </tr> </tbody> </table> <p>8.6 EPA Reportable Quantity: Not listed.</p> <p>8.7 EPA Pollution Category: Not listed.</p> <p>8.8 RCRA Waste Number: Not listed</p> <p>8.9 EPA FWPCA List: Not listed</p>	Category	Classification	Health Hazard (Blue)	0	Flammability (Red)	2	Instability (Yellow)	0	8. HAZARD CLASSIFICATIONS
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<p>1. CORRECTIVE RESPONSE ACTIONS Stop discharge Collection Systems: Skim Contain Chemical and Physical Treatment: Absorb Clean shore line Salvage waterfowl</p> <p>2. CHEMICAL DESIGNATIONS 2.1 CG Compatibility Group: 32; Aromatic Hydrocarbon 2.2 Formula: (C₆H₅)(CH(CH₃)₂)₂ 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: 1993 2.5 CAS Registry No.: 25321-09-9 2.6 NAERG Guide No.: 128 2.7 Standard Industrial Trade Classification: 51129</p> <p>3. HEALTH HAZARDS</p> <p>3.1 Personal Protective Equipment: Gloves impervious to aromatic hydrocarbon and splash-proof safety goggles. Approved organic cartridge respirator for exposure below 1,000 ppm. Full face piece is required above 500 ppm. Self-contained breathing apparatus or air supplied respirators above 1000 ppm. Clothing impervious to aromatic hydrocarbon.</p> <p>3.2 Symptoms Following Exposure: Vapors and liquid are irritating to eyes, mucous membrane, and upper respiratory tract and can cause headache, narcosis and unconsciousness. Systemic effects can have a relatively long duration after exposure. Ingestion can be moderately to severely toxic. Liquid can cause softening of skin and dermatitis.</p> <p>3.3 Treatment of Exposure: INHALATION: Call for medical aid. Remove the victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. INGESTION: Do not induce vomiting. EYES: Flush with lots of running water for 15 minutes, lifting lower and upper lids occasionally. SKIN: Wash with soap and water. Remove contaminated clothing.</p> <p>3.4 TLV-TWA: Not listed</p> <p>3.5 TLV-STEL: Currently not available</p> <p>3.6 TLV-Ceiling: Not listed.</p> <p>3.7 Toxicity by Ingestion: Grade 1; LD₅₀ = 6.5 g/kg (rat)</p> <p>3.8 Toxicity by Inhalation: Currently not available.</p> <p>3.9 Chronic Toxicity: Currently not available</p> <p>3.10 Vapor (Gas) Irritant Characteristics: Vapors cause a slight smarting of the eyes or respiratory system if present in high concentrations. The effect is temporary.</p> <p>3.11 Liquid or Solid Characteristics: Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of skin.</p> <p>3.12 Odor Threshold: Currently not available</p> <p>3.13 IDLH Value: Not listed.</p> <p>3.14 OSHA PEL-TWA: Not listed.</p> <p>3.15 OSHA PEL-STEL: Not listed.</p> <p>3.16 OSHA PEL-Ceiling: Not listed.</p> <p>3.17 EPA A EGL: Not listed</p>	<p>5. CHEMICAL REACTIVITY</p> <p>5.1 Reactivity with Water: No reaction.</p> <p>5.2 Reactivity with Common Materials: No reaction.</p> <p>5.3 Stability During Transport: Stable.</p> <p>5.4 Neutralizing Agents for Acids and Caustics: Not pertinent.</p> <p>5.5 Polymerization: Will not occur.</p> <p>5.6 Inhibitor of Polymerization: Not pertinent.</p> <p>6. WATER POLLUTION</p> <p>6.1 Aquatic Toxicity: Currently not available</p> <p>6.2 Waterfowl Toxicity: Currently not available</p> <p>6.3 Biological Oxygen Demand (BOD): Currently not available</p> <p>6.4 Food Chain Concentration Potential: Currently not available</p> <p>6.5 GESAMP Hazard Profile: Bioaccumulation: T Damage to living resources: 4 Human Oral hazard: 0/- Human Contact hazard: 0/- Reduction of amenities: 0/-</p>	<p>9. PHYSICAL & CHEMICAL PROPERTIES</p> <p>9.1 Physical State at 15° C and 1 atm: Liquid</p> <p>9.2 Molecular Weight: 162.30</p> <p>9.3 Boiling Point at 1 atm: 397-410°F = 202.78-210°C = 475.98-483.2°K</p> <p>9.4 Freezing Point: -81.4 to 1.4°F = -63 to -17°C = 210.2 to 256.2°K</p> <p>9.5 Critical Temperature: Currently not available</p> <p>9.6 Critical Pressure: Currently not available</p> <p>9.7 Specific Gravity: 0.86</p> <p>9.8 Liquid Surface Tension: Currently not available</p> <p>9.9 Liquid Water Interfacial Tension: Currently not available</p> <p>9.10 Vapor (Gas) Specific Gravity: 5.6</p> <p>9.11 Ratio of Specific Heats of Vapor (Gas): Currently not available</p> <p>9.12 Latent Heat of Vaporization: Currently not available</p> <p>9.13 Heat of Combustion: Currently not available</p> <p>9.14 Heat of Decomposition: Currently not available</p> <p>9.15 Heat of Solution: Currently not available</p> <p>9.16 Heat of Polymerization: Currently not available</p> <p>9.17 Heat of Fusion: Currently not available</p> <p>9.18 Limiting Value: Currently not available</p> <p>9.19 Reid Vapor Pressure: Currently not available</p>	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	
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		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
V E R Y L I M I T E D		104 154 179 206 237 256 282 320 364 408	0.019 0.097 0.193 0.387 0.774 1.160 1.934 3.867 7.735 14.696		C U R R E N T L Y N O T A V A I L A B L E	0 25 50 75 100 125 150 175 200 225 250 275 300 325 350 375 400 425 450 475 500 525 550 575 600	0.272 0.288 0.304 0.319 0.335 0.350 0.364 0.379 0.393 0.407 0.421 0.434 0.447 0.460 0.473 0.485 0.497 0.509 0.521 0.532 0.543 0.554 0.565 0.576 0.586