

# N-DECYL BENZENE

DBZ

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Decylbenzene 1-Phenyldecane		Liquid White  Floats on water.
<p>Keep people away. Shut off ignition sources. Call fire department. Avoid contact with liquid and vapor. Notify local health and pollution control agencies. Protect water intakes.</p>		
<b>Fire</b>	Combustible. Extinguish with dry chemicals or carbon dioxide. Water and foam may be ineffective on fire. Cool exposed containers with water.	
<b>Exposure</b>	CALL FOR MEDICAL AID.  VAPOR Irritating to eyes, nose and throat. If inhaled will cause coughing or difficult breathing. If in eyes, hold eyelids open and flush with plenty of water. If breathing has stopped, give artificial respiration. If breathing is difficult, give oxygen.  LIQUID Irritating to skin and eyes. If swallowed will cause nausea and vomiting. Remove contaminated clothing and shoes. Flush affected areas with plenty of water. IF IN EYES, hold eyelids open and flush with plenty of water. DO NOT INDUCE VOMITING.	
<b>Water Pollution</b>	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.	

<b>1. CORRECTIVE RESPONSE ACTIONS</b> Stop discharge Contain Collection Systems: Skim Chemical and Physical Treatment: Absorb Clean shore line Salvage waterfowl	<b>2. CHEMICAL DESIGNATIONS</b> 2.1 CG Compatibility Group: 32; Aromatic Hydrocarbon 2.2 Formula: C <sub>11</sub> H <sub>20</sub> (CH <sub>2</sub> ) <sub>9</sub> CH <sub>3</sub> 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: Not pertinent 2.5 CAS Registry No.: Not pertinent 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 51129
<b>3. HEALTH HAZARDS</b> 3.1 Personal Protective Equipment: Goggles or face shield; rubber gloves 3.2 Symptoms Following Exposure: Inhalation of vapor causes slight irritation of nose and throat. Aspiration of liquid into lungs causes coughing, distress, and pulmonary edema. Ingestion causes irritation of stomach. Contact with vapor or liquid causes irritation of eyes and mild irritation of skin. 3.3 Treatment of Exposure: INHALATION: move to fresh air. INGESTION: do NOT induce vomiting; call a doctor. EYES: flush with water. SKIN: wipe off; flush with water; wash with soap and water. ASPIRATION: enforced bed rest; administer oxygen; call a doctor. 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	

<b>4. FIRE HAZARDS</b> 4.1 Flash Point: 225°F C.C. 4.2 Flammable Limits in Air: Currently not available 4.3 Fire Extinguishing Agents: Dry chemical, carbon dioxide 4.4 Fire Extinguishing Agents Not to Be Used: Water or foam may cause frothing. 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: 5.04 mm/min. 4.10 Adiabatic Flame Temperature: Currently not available 4.11 Stoichiometric Air to Fuel Ratio: 107.1 (calc.) 4.12 Flame Temperature: Currently not available 4.13 Combustion Molar Ratio (Reactant to Product): 29.0 (calc.) 4.14 Minimum Oxygen Concentration for Combustion (MOCC): Not listed	<b>7. SHIPPING INFORMATION</b> 7.1 Grades of Purity: Commercial 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) 7.5 IMO Pollution Category: B 7.6 Ship Type: Data not available 7.7 Barge Hull Type: Currently not available  <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: <table border="0"> <tr> <td>Category</td> <td>Classification</td> </tr> <tr> <td>Health Hazard (Blue).....</td> <td>2</td> </tr> <tr> <td>Flammability (Red).....</td> <td>1</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0</td> </tr> </table> 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	Category	Classification	Health Hazard (Blue).....	2	Flammability (Red).....	1	Instability (Yellow).....	0
Category	Classification								
Health Hazard (Blue).....	2								
Flammability (Red).....	1								
Instability (Yellow).....	0								
<b>5. CHEMICAL REACTIVITY</b> 5.1 Reactivity with Water: No reaction 5.2 Reactivity with Common Materials: May attack some forms of plastics. 5.3 Stability During Transport: Stable 5.4 Neutralizing Agents for Acids and Caustics: Not pertinent 5.5 Polymerization: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent	<b>9. PHYSICAL &amp; CHEMICAL PROPERTIES</b> 9.1 Physical State at 15° C and 1 atm: Liquid 9.2 Molecular Weight: 218 9.3 Boiling Point at 1 atm: 572°F = 300°C = 573°K 9.4 Freezing Point: Not pertinent 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 0.855 at 20°C (liquid) 9.8 Liquid Surface Tension: 29.95 dynes/cm = 0.02995 N/m at 20°C 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: 103.8 Btu/lb = 57.67 cal/g = 2.413 X 10 <sup>5</sup> J/kg 9.13 Heat of Combustion: -18,400 Btu/lb = -10,200 cal/g = -427 X 10 <sup>5</sup> J/kg 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: Not pertinent 9.18 Limiting Value: Not pertinent 9.19 Reid Vapor Pressure: Not pertinent								
<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: 0 Human Oral hazard: - Human Contact hazard: - Reduction of amenities: -									
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
34	53.430	42	0.340	42	1.048	52	4.669
36	53.420	44	0.340	44	1.048	54	4.546
38	53.420	46	0.340	46	1.048	56	4.427
40	53.410	48	0.340	48	1.048	58	4.311
42	53.410	50	0.340	50	1.048	60	4.200
44	53.400	52	0.340	52	1.048	62	4.092
46	53.400	54	0.340	54	1.048	64	3.988
48	53.390	56	0.340	56	1.048	66	3.887
50	53.390	58	0.340	58	1.048	68	3.790
52	53.380	60	0.340	60	1.048	70	3.696
54	53.380	62	0.340	62	1.048	72	3.604
56	53.370	64	0.340	64	1.048	74	3.516
58	53.370	66	0.340	66	1.048	76	3.431
60	53.370	68	0.340	68	1.048	78	3.348
62	53.360	70	0.340	70	1.048	80	3.267
64	53.360	72	0.340	72	1.048	82	3.190
66	53.350	74	0.340	74	1.048	84	3.114
68	53.350	76	0.340	76	1.048	86	3.041
70	53.340					88	2.970
72	53.340					90	2.902
74	53.330					92	2.835
76	53.330					94	2.771
78	53.320					96	2.708
80	53.320					98	2.647
82	53.310					100	2.588
84	53.310					102	2.531

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	400	1.268	400	0.02995		N
	N	410	1.518	410	0.03545		O
	S	420	1.808	420	0.04175		T
	O	430	2.143	430	0.04892		
	L	440	2.528	440	0.05706		P
	U	450	2.967	450	0.06624		E
	B	460	3.468	460	0.07657		R
	L	470	4.035	470	0.08814		T
	E	480	4.676	480	0.10110		I
		490	5.398	490	0.11540		N
		500	6.207	500	0.13130		E
		510	7.112	510	0.14890		N
		520	8.120	520	0.16830		T
		530	9.239	530	0.18960		
		540	10.480	540	0.21290		
		550	11.850	550	0.23830		
		560	13.360	560	0.26600		
		570	15.010	570	0.29610		