

OILS, EDIBLE: SOYA BEAN

OSB

CAUTIONARY RESPONSE INFORMATION

Common Synonyms Soybean oil		Oily liquid	Pale yellow	Weak odor
Floats on water.				
Call fire department. Notify local health and pollution control agencies.				
Fire	Combustible. Extinguish with dry chemical, foam or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water.			
Exposure	Not harmful.			
Water Pollution	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>1. CORRECTIVE RESPONSE ACTIONS</p> <ul style="list-style-type: none"> Stop discharge Contain Collection Systems: Skim Chemical and Physical Treatment: Absorb Clean shore line Salvage waterfowl 	<p>2. CHEMICAL DESIGNATIONS</p> <ul style="list-style-type: none"> 2.1 CG Compatibility Group: 34; Ester 2.2 Formula: Not applicable 2.3 IMO/UN Designation: Not listed 2.4 DOT ID No.: Not listed 2.5 CAS Registry No.: Currently not available 2.6 NAERG Guide No.: Not listed 2.7 Standard Industrial Trade Classification: 9899
<p>3. HEALTH HAZARDS</p> <ul style="list-style-type: none"> 3.1 Personal Protective Equipment: Goggles or face shield. 3.2 Symptoms Following Exposure: None-is a food. 3.3 Treatment of Exposure: EYES: flush with water for at least 15 min. 3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 Toxicity by Ingestion: None 3.8 Toxicity by Inhalation: Currently not available. 3.9 Chronic Toxicity: None 3.10 Vapor (Gas) Irritant Characteristics: None 3.11 Liquid or Solid Characteristics: None 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>4. FIRE HAZARDS</p> <ul style="list-style-type: none"> 4.1 Flash Point: 540°F C.C. 4.2 Flammable Limits in Air: Currently not available 4.3 Fire Extinguishing Agents: Dry chemical, foam, or carbon dioxide 4.4 Fire Extinguishing Agents Not to Be Used: Water or foam may cause frothing. 4.5 Special Hazards of Combustion Products: Not pertinent 4.6 Behavior in Fire: Not pertinent 4.7 Auto Ignition Temperature: 833°F 4.8 Electrical Hazards: Not pertinent 4.9 Burning Rate: Currently not available 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>7. SHIPPING INFORMATION</p> <ul style="list-style-type: none"> 7.1 Grades of Purity: Refined; crude 7.2 Storage Temperature: Ambient 7.3 Inert Atmosphere: No requirement 7.4 Venting: Open (flame arrester) 7.5 IMO Pollution Category: D 7.6 Ship Type: Data not available 7.7 Barge Hull Type: Currently not available <p>8. HAZARD CLASSIFICATIONS</p> <ul style="list-style-type: none"> 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="1"> <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>1</td> </tr> <tr> <td>Instability (Yellow).....</td> <td>0</td> </tr> </tbody> </table> <ul style="list-style-type: none"> 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).....	0	Flammability (Red).....	1	Instability (Yellow).....	0
Category	Classification								
Health Hazard (Blue).....	0								
Flammability (Red).....	1								
Instability (Yellow).....	0								
<p>5. CHEMICAL REACTIVITY</p> <ul style="list-style-type: none"> 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: Not pertinent 5.6 Inhibitor of Polymerization: Not pertinent 	<p>9. PHYSICAL & CHEMICAL PROPERTIES</p> <ul style="list-style-type: none"> 9.1 Physical State at 15° C and 1 atm: Liquid 9.2 Molecular Weight: Not pertinent 9.3 Boiling Point at 1 atm: Very high 9.4 Freezing Point: -4°F = -20°C = 253°K 9.5 Critical Temperature: Not pertinent 9.6 Critical Pressure: Not pertinent 9.7 Specific Gravity: 0.922 at 20°C (liquid) 9.8 Liquid Surface Tension: (est.) 25 dynes/cm = 0.025 N/m at 20°C 9.9 Liquid Water Interfacial Tension: (est.) 50 dynes/cm = 0.05 N/m at 20°C 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: (est.) -16,000 Btu/lb = -8,870 cal/g = -371 X 10³ 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: Currently not available 9.18 Limiting Value: Currently not available 9.19 Reid Vapor Pressure: 0.10 psia 								
<p>6. WATER POLLUTION</p> <ul style="list-style-type: none"> 6.1 Aquatic Toxicity: Currently not available 6.2 Waterfowl Toxicity: Currently not available 6.3 Biological Oxygen Demand (BOD): 39%, 5 days 6.4 Food Chain Concentration Potential: None 6.5 GESAMP Hazard Profile: Bioaccumulation: 0 Damage to living resources: 0 Human Oral hazard: 0 Human Contact hazard: 0 Reduction of amenities: XX 									
<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
50	56.800	30	0.447	50	1.179	50	3909.000
52	56.730	40	0.450	60	1.179	55	3027.000
54	56.670	50	0.453	70	1.179	60	2356.000
56	56.600	60	0.456	80	1.179	65	1842.000
58	56.530	70	0.459	90	1.179	70	1448.000
60	56.460	80	0.463	100	1.179	75	1142.000
62	56.390	90	0.466	110	1.179	80	905.500
64	56.320	100	0.469	120	1.179	85	720.799
66	56.250	110	0.472	130	1.179	90	576.199
68	56.180	120	0.475	140	1.179	95	462.399
70	56.110	130	0.478	150	1.179	100	372.599
72	56.040	140	0.481	160	1.179	105	301.399
74	55.970	150	0.485	170	1.179	110	244.699
76	55.900	160	0.488	180	1.179	115	199.299
78	55.830	170	0.491	190	1.179	120	163.000
80	55.760	180	0.494	200	1.179	125	133.699
82	55.690			210	1.179	130	110.099
84	55.630					135	90.940
86	55.560						
88	55.490						
90	55.420						
92	55.350						
94	55.280						
96	55.210						
98	55.140						
100	55.070						

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	35	0.013		N		N
	N	40	0.016		O		O
	S	45	0.018		T		T
	O	50	0.022		P		P
	L	55	0.026		E		E
	U	60	0.030		R		R
	B	65	0.035		T		T
	L	70	0.041		I		I
	E	75	0.048		N		N
		80	0.056		E		E
		85	0.065		N		N
		90	0.075		T		T
		95	0.086				
		100	0.099				
		105	0.113				
		110	0.129				
		115	0.147				
		120	0.168				