

# WAXES: PARAFFIN

WPF

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> Petroleum wax	Thick liquid (heated)    Yellow to white    Waxy odor  Floats on water and solidifies.
<p style="color: red;">Call fire department. Avoid contact with liquid. Notify local health and pollution control agencies.</p>	
<b>Fire</b>	Combustible. Extinguish with water, foam, dry chemical, or carbon dioxide.
<b>Exposure</b>	LIQUID Will burn skin and eyes. Remove wax. Flush affected areas with plenty of water.
<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.

### 1. CORRECTIVE RESPONSE ACTIONS

Stop discharge  
Contain  
Collection Systems: Skim  
Clean shore line  
Salvage waterfowl

### 2. CHEMICAL DESIGNATIONS

2.1 **CG Compatibility Group:** Not listed.  
2.2 **Formula:** Not pertinent  
2.3 **IMO/IUN Designation:** Not listed  
2.4 **DOT ID No.:** Not listed  
2.5 **CAS Registry No.:** 8002-74-2  
2.6 **NAERG Guide No.:** Not listed  
2.7 **Standard Industrial Trade Classification:** 33510

### 3. HEALTH HAZARDS

3.1 **Personal Protective Equipment:** Goggles or face shield; protective gloves and clothing for hot liquid wax.  
3.2 **Symptoms Following Exposure:** Hot wax can burn eyes and skin.  
3.3 **Treatment of Exposure:** SKIN OR EYE CONTACT: remove solidified wax; wash skin with soap and water; if in eyes, call a doctor.  
3.4 **TLV-TWA:** 2.0 mg/m<sup>3</sup>  
3.5 **TLV-STEL:** Not listed.  
3.6 **TLV-Ceiling:** Not listed.  
3.7 **Toxicity by Ingestion:** Grade 1; LD<sub>50</sub> = 5 to 15 g/kg  
3.8 **Toxicity by Inhalation:** Currently not available.  
3.9 **Chronic Toxicity:** None  
3.10 **Vapor (Gas) Irritant Characteristics:** Non-volatile  
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

### 4. FIRE HAZARDS

4.1 **Flash Point:** 390°F C.C. 380–465°F O.C.  
4.2 **Flammable Limits in Air:** Not pertinent  
4.3 **Fire Extinguishing Agents:** Water, foam, dry chemical, 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:** 473°F  
4.8 **Electrical Hazards:** Not pertinent  
4.9 **Burning Rate:** Not pertinent  
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

### 5. CHEMICAL REACTIVITY

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

### 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: 0  
Human Oral hazard: 0  
Human Contact hazard: 0  
Reduction of amenities: 0

### 7. SHIPPING INFORMATION

7.1 **Grades of Purity:** Crude-scale; refined  
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

### 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).....	0
Flammability (Red).....	1
Instability (Yellow).....	0

8.6 **EPA Reportable Category:** 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:** Solid  
9.2 **Molecular Weight:** Not pertinent  
9.3 **Boiling Point at 1 atm:** Very high (about 700°F)  
9.4 **Freezing Point:** 118–149°F = 48–65°C = 321–338°K  
9.5 **Critical Temperature:** Not pertinent  
9.6 **Critical Pressure:** Not pertinent  
9.7 **Specific Gravity:** 0.9 at 20°C  
9.8 **Liquid Surface Tension:** 30.6 dynes/cm = 0.0306 N/m at 54°C  
9.9 **Liquid Water Interfacial Tension:** 35–50 dynes/cm = 0.035–0.050 N/m at 54°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:** –18,000 Btu/lb = –10,000 cal/g = –430 X 10<sup>3</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:** Currently not available  
9.18 **Limiting Value:** Currently not available  
9.19 **Reid Vapor Pressure:** Very low

### 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
280	48.690	145	0.607	280	1.040		C
282	48.690	150	0.607	282	1.040		U
284	48.690	155	0.607	284	1.040		R
286	48.690	160	0.607	286	1.040		R
288	48.690	165	0.607	288	1.040		E
290	48.690	170	0.607	290	1.040		N
292	48.690	175	0.607	292	1.040		T
294	48.690	180	0.607	294	1.040		L
296	48.690	185	0.607	296	1.040		Y
298	48.690	190	0.607	298	1.040		
300	48.690	195	0.607	300	1.040		N
302	48.690	200	0.607	302	1.040		O
304	48.690	205	0.607	304	1.040		T
306	48.690	210	0.607	306	1.040		
308	48.690	215	0.607	308	1.040		A
310	48.690	220	0.607	310	1.040		V
312	48.690	225	0.607	312	1.040		A
314	48.690	230	0.607	314	1.040		I
316	48.690	235	0.607	316	1.040		L
318	48.690	240	0.607	318	1.040		L
320	48.690	245	0.607	320	1.040		A
322	48.690	250	0.607	322	1.040		B
324	48.690	255	0.607	324	1.040		L
326	48.690	260	0.607	326	1.040		L
328	48.690			328	1.040		E
330	48.690			330	1.040		

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		C U R R E N T L Y		N O T
			N O T		N O T		P E R T I N E N T
			A V A I L A B L E		A V A I L A B L E		