

NAPHTHENIC ACIDS

NTI

CAUTIONARY RESPONSE INFORMATION

Common Synonyms	Liquid Gold to black May float or sink in water.
<p>Keep people away. Avoid contact with liquid and vapor. Call fire department. Notify local health and pollution control agencies. Protect water intakes.</p>	
Fire	<p>Combustible. Extinguish with dry chemicals, foam or carbon dioxide. Water may be ineffective on fire. Cool exposed containers with water.</p>
Exposure	<p>CALL FOR MEDICAL AID.</p> <p>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.</p> <p>LIQUID 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 CONSCIOUS, have victim drink water or milk. IF SWALLOWED and victim is UNCONSCIOUS OR HAVING CONVULSIONS, do nothing except keep victim warm.</p>
Water Pollution	<p>HARMFUL TO AQUATIC LIFE IN VERY LOW CONCENTRATIONS. 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

Stop discharge
Contain
Collection Systems: Skim
Chemical and Physical Treatment:
Absorb
Clean shore line
Salvage waterfowl

2. CHEMICAL DESIGNATIONS

2.1 **CG Compatibility Group:** Not listed.
2.2 **Formula:** R₂C-CR₂-CR₂-CR₂-CR₂-(CH₂)_n-COOH where n = 2-6
2.3 **IMO/UN Designation:** Not listed
2.4 **DOT ID No.:** 9137
2.5 **CAS Registry No.:** 1338-24-5
2.6 **NAERG Guide No.:** 171
2.7 **Standard Industrial Trade Classification:** 51385

3. HEALTH HAZARDS

3.1 **Personal Protective Equipment:** Safety glasses or face mask
3.2 **Symptoms Following Exposure:** Principal effect is that of mild primary irritation when encountered in high concentrations. Inhalation of vapor causes coughing. Liquid is moderately irritating to eyes and slightly to moderately irritating to skin; excessive exposure could result in dermatitis.
3.3 **Treatment of Exposure:** INHALATION: remove to fresh air. INGESTION: give large amounts of water. EYES: flush with water until irritation subsides. SKIN: wash with soap and water; remove contaminated clothing and laundry before reuse.
3.4 **TLV-TWA:** Not listed.
3.5 **TLV-STEL:** Not listed.
3.6 **TLV-Ceiling:** Not listed.
3.7 **Toxicity by Ingestion:** Grade 2; oral LD₅₀ = 3,000 mg/kg (rat)
3.8 **Toxicity by Inhalation:** Currently not available.
3.9 **Chronic Toxicity:** Currently not available
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.
3.11 **Liquid or Solid Characteristics:** Minimum hazard. If spilled on clothing and allowed to remain, may cause smarting and reddening of skin.
3.12 **Odor Threshold:** Odorless
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:** 300°F O.C.
4.2 **Flammable Limits in Air:** 1.0% (LFL)
4.3 **Fire Extinguishing Agents:** Foam, dry chemical, or 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:** 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

5. CHEMICAL REACTIVITY

5.1 **Reactivity with Water:** No reaction
5.2 **Reactivity with Common Materials:** Currently not available
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:**
5-50 ppm/18-60 hr/crayfish/lethal/fresh water
5.6 ppm/96 hr/bluegill/TLW/fresh water
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:** Not listed

7. SHIPPING INFORMATION

7.1 **Grades of Purity:** Commercial, 100%
7.2 **Storage Temperature:** Ambient
7.3 **Inert Atmosphere:** No requirement
7.4 **Venting:** Open
7.5 **IMO Pollution Category:** A
7.6 **Ship Type:** 2
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:** Yes
8.5 **NFPA Hazard Classification:** Not listed
8.6 **EPA Reportable Quantity:** 100 pounds
8.7 **EPA Pollution Category:** B
8.8 **RCRA Waste Number:** Not listed
8.9 **EPA FWPCA List:** Yes

9. PHYSICAL & CHEMICAL PROPERTIES

9.1 **Physical State at 15° C and 1 atm:** Liquid
9.2 **Molecular Weight:** 200-250 (mixture)
9.3 **Boiling Point at 1 atm:** 270-470°F = 132-243°C = 405-516°K
9.4 **Freezing Point:** Not pertinent
9.5 **Critical Temperature:** Not pertinent
9.6 **Critical Pressure:** Not pertinent
9.7 **Specific Gravity:** 0.982 at 20°C (liquid)
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:** Currently not available
9.13 **Heat of Combustion:** Currently not available
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

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
67	61.170		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
	C U R R E N T L Y N O T A V A I L A B 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