

# SALICYLALDEHYDE

SAL

## CAUTIONARY RESPONSE INFORMATION

<b>Common Synonyms</b> 2-Formyl phenol O-Hydroxybenzaldehyde Salicylal Salicylic aldehyde	Liquid Colorless or pale yellow Bitter almond odor  Sinks and mixes slowly in water.
<p style="color: red;">Keep people away. Avoid contact with vapor or liquid. Wear goggles and self-contained breathing apparatus. shut off ignition sources and call fire department. Notify local health and pollution control agencies. Protect water intakes.</p>	
<b>Fire</b>	Combustible. Extinguish with water fog, alcohol foam, CO <sub>2</sub> or dry chemical.
<b>Exposure</b>	CALL FOR MEDICAL AID.  LIQUID Irritating to 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 and victim is CONSCIOUS, have victim drink water or milk and have victim induce vomiting.
<b>Water Pollution</b>	Effect of low concentration on aquatic life is unknown. 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> Dilute and disperse Stop discharge Contain Collection Systems: Pump; Dredge	<b>2. CHEMICAL DESIGNATIONS</b> 2.1 CG Compatibility Group: Not listed. 2.2 Formula: HOc <sub>6</sub> H <sub>4</sub> CHO 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: 51622
<b>3. HEALTH HAZARDS</b>	
<p>3.1 <b>Personal Protective Equipment:</b> Rubber gloves, self-contained breathing apparatus, laboratory coat and chemical work goggles.</p> <p>3.2 <b>Symptoms Following Exposure:</b> INHALATION: Irritation of mucous membranes. May effect lungs. Anesthetic and narcotic effects. EYES: Irritation, possible corneal injury. SKIN: Irritation. May cause skin rashes in sensitive individuals. INGESTION: Vomiting, abdominal pain, acidosis.</p> <p>3.3 <b>Treatment of Exposure:</b> Call a doctor. INHALATION: Remove from exposure. Treat respiratory depression with artificial respiration and oxygen. EYES: Irrigate with water for at least 15 minutes. SKIN: Wash with soap and water. Remove contaminated clothing. INGESTION: Induce vomiting with ipecac. Delay absorption by giving activated charcoal. Use saline cathartic. in mild poisoning with adequate urine output and no vomiting, give milk and fruit juice every hour. Treat acidosis with sodium bicarbonate (7.5% solution).</p> <p>3.4 TLV-TWA: Not listed. 3.5 TLV-STEL: Not listed. 3.6 TLV-Ceiling: Not listed. 3.7 <b>Toxicity by Ingestion:</b> Grade 2: LD<sub>50</sub> = 500 to 5,000 mg/kg. 3.8 <b>Toxicity by Inhalation:</b> Currently not available. 3.9 <b>Chronic Toxicity:</b> Currently not available</p> <p>3.10 <b>Vapor (Gas) Irritant Characteristics:</b> Not pertinent</p> <p>3.11 <b>Liquid or Solid Characteristics:</b> Causes smarting of the skin and first-degree burns on short exposure: may cause second-degree burns on long exposure.</p> <p>3.12 <b>Odor Threshold:</b> Currently not available</p> <p>3.13 <b>IDLH Value:</b> Not listed. 3.14 <b>OSHA PEL-TWA:</b> Not listed. 3.15 <b>OSHA PEL-STEL:</b> Not listed. 3.16 <b>OSHA PEL-Ceiling:</b> Not listed. 3.17 <b>EPA AEGL:</b> Not listed</p>	

## 4. FIRE HAZARDS

- 4.1 **Flash Point:** 172°F C.C.
- 4.2 **Flammable Limits in Air:** Currently not available
- 4.3 **Fire Extinguishing Agents:** Alcohol foam, water fog, dry chemical, CO<sub>2</sub>
- 4.4 **Fire Extinguishing Agents Not to Be Used:** Currently not available
- 4.5 **Special Hazards of Combustion Products:** Currently not available
- 4.6 **Behavior in Fire:** Can react with oxidizing materials.
- 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:** 35.7 (calc.)
- 4.12 **Flame Temperature:** Currently not available
- 4.13 **Combustion Molar Ratio (Reactant to Product):** 10.0 (calc.)
- 4.14 **Minimum Oxygen Concentration for Combustion (MOCC):** Not listed

## 7. SHIPPING INFORMATION

- 7.1 **Grades of Purity:** >98.5
- 7.2 **Storage Temperature:** Cool.
- 7.3 **Inert Atmosphere:** Currently not available
- 7.4 **Venting:** Currently not available
- 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 **HAZARD CLASSIFICATION:**

Category	Classification
Health Hazard (Blue).....	2
Flammability (Red).....	2
Instability (Yellow).....	0
- 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

## 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:** Currently not available
- 5.5 **Polymerization:** Will not occur.
- 5.6 **Inhibitor of Polymerization:** Not pertinent

## 9. PHYSICAL & CHEMICAL PROPERTIES

- 9.1 **Physical State at 15° C and 1 atm:** Liquid
- 9.2 **Molecular Weight:** 122.12.
- 9.3 **Boiling Point at 1 atm:** 386°F = 197°C = 470°K.
- 9.4 **Freezing Point:** 19.4°F = -7°C = 266.2°K.
- 9.5 **Critical Temperature:** (est.) 802.6°F = 428.1°C = 701.3°K.
- 9.6 **Critical Pressure:** (est.) 590.8 psia = 40.2 atm = 4.07 MN/m<sup>2</sup>
- 9.7 **Specific Gravity:** 1.1674 at 20°C.
- 9.8 **Liquid Surface Tension:** 42.90 dynes/cm = 0.0490 N/m at 20°C.
- 9.9 **Liquid Water Interfacial Tension:** Not pertinent
- 9.10 **Vapor (Gas) Specific Gravity:** 4.2
- 9.11 **Ratio of Specific Heats of Vapor (Gas):** Currently not available
- 9.12 **Latent Heat of Vaporization:** (Est.) 145.2 Btu/lb = 80.7 cal/g = 3.37 X 10<sup>5</sup> J/kg.
- 9.13 **Heat of Combustion:** at 25°C -11273 Btu/lb = -6263 cal/g = -262 X 10<sup>5</sup> J/kg.
- 9.14 **Heat of Decomposition:** Not pertinent
- 9.15 **Heat of Solution:** Currently not available
- 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

## 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:** Probably none.
- 6.5 **GESAMP Hazard Profile:** Not listed

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

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		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