



MATERIAL SAFETY DATA SHEETS

SECTION I

PRODUCT AND COMPANY IDENTIFICATION

Product: Salicylic acid

This MSDS is valid for all grades and catalog #'s

Synonyms: 2-hydroxybenzoic acid; Benzoic acid, 2-hydroxy-; Orthohydroxybenzoic acid; o-Hydroxybenzoic acid

Formula: C₇H₆O₃

Manufacturer: PHARMCO-AAPER
58 Vale Road
Brookfield, Connecticut 06804, USA
Phone (203) 740-3471
Fax (203) 740-3481

1101 Isaac Shelby Drive
Shelbyville, KY 40065
Phone (502) 633-0650
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Emergency Contact:
CHEMTREC 1-800-424-9300

SECTION II

COMPOSITION / INFORMATION ON INGREDIENTS

% by weight	Material	CAS #	TLV/PEL	LC50/LD50
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100	Salicylic acid	69-72-7	Not available	ORAL (LD50): Acute: 891 mg/kg [Rat]. 480mg/kg [Mouse]. 1300 mg/kg [Rabbit].
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SECTION III

HAZARDS IDENTIFICATION

Potential Acute Health Effects: Hazardous in case of eye contact (irritant), of ingestion. Slightly hazardous in case of skin contact (irritant, permeator), of inhalation. Severe over-exposure can result in death.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available.

MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast.

TERATOGENIC EFFECTS: Not available.

DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].

Repeated exposure to a highly toxic material may produce general deterioration of health by an accumulation in one or

many human organs.

SECTION IV

FIRST AID

Obtain medical attention for all cases of over-exposure.

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. Get medical attention immediately.

Skin Contact: In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Hazardous Skin Contact: Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.

Hazardous Inhalation: Not available.

Ingestion: Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Hazardous Ingestion: Notes to Physician: Treatment is largely symptomatic. Methods to rid the body rapidly of the Salicylic acid should be undertaken. Absorption of the salicylic acid from the gastrointestinal tract can be reduced by gastric lavage, administration of activated charcoal or a combination of these. If patient has acidosis, correction of blood pH is essential.

SECTION V

FIRE FIGHTING MEASURES

Fire:

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition temperature: 545°C (1013°F)

Flash point: CLOSED CUP: 157°C (314.6°F).

Flammable limits: LOWER: 1.1%

Products of Combustion: These products are carbon oxides (CO, CO₂).

Fire Hazards: Slightly flammable to flammable in presence of heat.

Explosion Hazards: Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Extinguishing Media: SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Information: As with most organic solids, fire is possible at elevated temperatures. Dust-Air mixtures may pose an explosion hazard.

SECTION VI

SPILL/ACCIDENTAL RELEASE MEASURES

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill: Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

SECTION VII

HANDLING AND STORAGE

Precautions: Keep away from heat. Keep away from sources of ignition. Ground all equipment containing material. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents

Storage: Keep container tightly closed. Keep container in a cool, well-ventilated area. Moisture sensitive. Sensitive to light. Store in light-resistant containers.

SECTION VIII

EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection: Safety glasses. Lab coat. Dust respirator. Use a dust respirator if ventilation is inadequate and handling of material results in visible dust clouds. Be sure to use an approved/certified respirator or equivalent. Gloves (impervious).

Personal Protection in Case of a Large Spill: Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

SECTION IX

PHYSICAL AND CHEMICAL PROPERTIES

Physical State/Appearance: Solid. (crystalline granules)

Molecular Weight: 138.12 g/mole

Odor: Odorless.

Taste: Sweetish, afterward acrid

Color: White.

pH (1% Solution in Water): Not available.

Boiling Point: Decomposition temperature: 211°C (411.8°F)

Melting Point: 159°C (318.2°F)

Critical Temperature: Not available.

Specific Gravity: 1.443 (Water = 1)

Vapor Pressure (mm Hg): Not applicable.

Vapor Density (Air=1): 4.8 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Evaporation Rate: Not available.

Viscosity: Not available.

Water/Oil Dist. Coefficient: The product is more soluble in oil; log(oil/water) = 2.3

Ionicity (in water): Not available.

Dispersion Properties: See solubility in water, acetone.

Solubility: Soluble in acetone. Partially soluble in cold water. Very slightly soluble in hot water.

SECTION X

STABILITY/REACTIVITY INFORMATION

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excessive heat, excessive dust generation, Incompatible materials. Dust-Air mixtures

Incompatibilities: Reactive with oxidizing agents.

Corrosivity: Non-corrosive in presence of glass.

Special Information: Light, moisture, Iron salts, spirt nitrous ether, lead acetate, iodine

SECTION XI

TOXICOLOGICAL INFORMATION

Routes of Entry: Absorbed through skin. Inhalation. Ingestion.

Toxicity to Animals: Acute oral toxicity (LD50): 480 mg/kg [Mouse]. Acute toxicity of the dust (LC50): 900 mg/m³ 1 hours [Rat].

Chronic Effects on Humans: MUTAGENIC EFFECTS: Mutagenic for bacteria and/or yeast. DEVELOPMENTAL TOXICITY: Classified Reproductive system/toxin/female, Development toxin [POSSIBLE].

Other Toxic Effects on Humans: Hazardous in case of ingestion. Slightly hazardous in case of skin contact (irritant, permeator), of inhalation.

Special Information on Toxicity to Animals: Not available.

Special Information on Chronic Effects/Toxicity on Humans: May affect genetic material (mutagenicity) based on animal studies. May cause adverse reproductive effects. Teratogenic, Embryotoxic and/or foetotoxic in animal studies. Human: Transferred into maternal breast milk. Acute Potential Health Effects: Skin: Can cause mild skin irritation. It may be absorbed through the skin. If absorbed through the skin, it may affect the cardiovascular system (increase in pulse rate), liver, and metabolism (body

temperature increase), and cause other symptoms similar to those from ingestion. Eye: Causes eye irritation, temporary injury. Inhalation: Inhalation of dust can cause respiratory tract irritation, coughing, sneezing, and shortness of breath/rapid breathing. Ingestion: May be harmful if swallowed in large amounts. Causes irritation of the gastrointestinal tract (nausea, vomiting abdominal pains). Ingestion of a sizable amount can cause "Salicylism" as evidenced by nausea, abdominal pain, vomiting, increased respiration/rapid breathing, ringing in the ears/difficulty hearing, dimness of vision, sweating, thirst, skin eruptions, and alteration in the acid-base balance. Severe salicylate intoxication may also affect behavior/central nervous system with symptoms such as muscle weakness, general depressed activity (somnia), sleepiness, tremor, confusion, dizziness, agitation, irritability, disorientation, slurred speech, ataxia, restlessness, hyperactivity, hallucinations, convulsions, central nervous system depression, coma. It may also affect the cardiovascular system (hypotension, increased or decreased heart rate), liver. Fatalities resulting from respiratory or cardiovascular failure are known. The mean lethal adult dose of salicylates is between 20 and 30 grams. Chronic Potential Health Effects: Possible hypersensitization. Ingestion: Prolonged ingestion may cause kidney damage, liver damage, damage to stomach, involuntary shaking, anemia, internal bleeding, and other symptoms similar to acute ingestion. The pancreas may also be affected by prolonged ingestion of salicylic acid.

SECTION XII

ECOLOGICAL INFORMATION

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Information on Products of Biodegradation: Not available.

SECTION XIII

DISPOSAL CONSIDERATIONS

Waste Disposal: Recycle to process, if possible. Consult your local or regional authorities. Dispose of in accordance with Federal, State, and Local regulations.

SECTION XIV

TRANSPORTATION INFORMATION

DOT Classification: DOT Not a DOT controlled material (United States).

UN: Not applicable.

Special Provisions for Transport: Not applicable.

SECTION XV

REGULATORY INFORMATION

Federal and State Regulations: Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires emergency planning based on Threshold Planning Quantities

(TPQs) and release reporting based on Reportable Quantities (RQs) in 40 CFR 355 (used for SARA 302, 304, 311 and 312). Components present in this product at a level which could require reporting under the statute are: **NONE** Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires submission of annual report release of toxic chemicals that appear in 40 CFR 372 (used for SARA 313). This information must be included in all MSDSs that are copied and distributed for this material. Components present in this product at a level which could require reporting under the statute are: **NONE** **Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA):** No chemicals in this material with known CAS numbers are subject to the reporting requirements of CERCLA.

Other Classifications:

WHMIS (Canada): CLASS D-2A: Material causing other toxic effects (VERY TOXIC).

DSCL (EEC): R22- Harmful if swallowed. R37/38- Irritating to respiratory system and skin. R41- Risk of serious damage to eyes.

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate. Safety glasses.

References: Not available.

Other Special Considerations: Major uses: Medication; manufacture of other salicylates; chemical intermediate for synthesis of aspirin, rubber retarders; in dyestuff

The information contained herein is based on data considered to be accurate based on the material as packaged. However, no warranty is expressed regarding the accuracy of these data or the results to be obtained from the use thereof. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It is the user's obligation to determine the conditions of safe use of the product. While this MSDS is based on technical data judged to be reliable, PHARMCO-AAPER assumes not responsibility for the completeness or accuracy of the information contained herein.