

Material Safety Data Sheet

Salicylic acid

ACC# 20315

Section 1 - Chemical Product and Company Identification

MSDS Name: Salicylic acid

Catalog Numbers: AC147700000, AC147700010, AC385730000, AC419220000, AC419220020, AC419220025, AC419225000, S78056, S780561, S93345, A275-12, A275-212, A275-500, A275250LB, A277-500

Synonyms: o-Hydroxybenzoic acid; 2-Hydroxybenzoic acid.

Company Identification:

Fisher Scientific
1 Reagent Lane
Fair Lawn, NJ 07410

For information, call: 201-796-7100

Emergency Number: 201-796-7100

For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
69-72-7	Salicylic acid	>99	200-712-3

Section 3 - Hazards Identification

EMERGENCY OVERVIEW

Appearance: white crystalline powder.

Warning! Causes severe eye irritation. Causes skin and respiratory tract irritation. May be harmful if swallowed. May cause central nervous system effects. Light sensitive. May cause reproductive and fetal effects.

Target Organs: Kidneys, central nervous system, pancreas.

Potential Health Effects

Eye: Causes severe eye irritation. May result in corneal injury.

Skin: Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. If absorbed, may cause symptoms similar to those for ingestion. May cause skin rash and eruptions.

Ingestion: Causes gastrointestinal irritation with nausea, vomiting and diarrhea. May cause "salicylism"; characterized by headache, dizziness, ringing in the ears, hearing difficulty, visual disturbances, mental confusion, drowsiness, sweating, thirst, hyperventilation, nausea, vomiting and diarrhea. May be harmful if swallowed. Severe salicylate intoxication may cause central nervous system disturbances such as convulsions and coma, skin eruptions, and alteration in the acid-base balance.

Inhalation: Causes irritation of the mucous membrane and upper respiratory tract.

Chronic: May cause reproductive and fetal effects. Laboratory experiments have resulted in mutagenic effects. May cause salicylism with effects similar to those of skin absorption. May cause damage to the kidneys and pancreas.

Section 4 - First Aid Measures

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

Ingestion: Call a poison control center. If swallowed, do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical aid.

Inhalation: Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Follow with gastric lavage with activated charcoal. If available, administer ferric hexacyanoferrate as a gastrointestinal trapping agent. Persons with pre-existing skin disorders, eye problems, or impaired kidney function may be more susceptible to the effects of this substance.

Section 5 - Fire Fighting Measures

General Information: As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts at sufficient concentrations can form explosive mixtures with air. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: For small fires, use dry chemical, carbon dioxide, water spray or alcohol-resistant foam. Water or foam may cause frothing. Use agent most appropriate to extinguish fire.

Flash Point: 157 deg C (314.60 deg F)

Autoignition Temperature: 535 deg C (995.00 deg F)

Explosion Limits, Lower: 1.1 % @ 392F

Upper: Not available.

NFPA Rating: (estimated) Health: 0; Flammability: 1; Instability: 0

Section 6 - Accidental Release Measures

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Vacuum or sweep up material and place into a suitable disposal container. Avoid generating dusty conditions. Remove all sources of ignition. Provide ventilation.

Section 7 - Handling and Storage

Handling: Wash thoroughly after handling. Remove contaminated clothing and wash before reuse. Use only in a well-ventilated area. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Avoid ingestion and inhalation.

Storage: Keep away from sources of ignition. Do not store in direct sunlight. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

Section 8 - Exposure Controls, Personal Protection

Engineering Controls: Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local exhaust ventilation to keep airborne concentrations below the permissible exposure limits.

Exposure Limits

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Salicylic acid	none listed	none listed	none listed

OSHA Vacated PELs: Salicylic acid: No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin: Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

Respirators: A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN 149 must be followed whenever workplace conditions warrant respirator use.

Section 9 - Physical and Chemical Properties

Physical State: Crystalline powder

Appearance: white

Odor: odorless - slight phenolic odor

pH: 2.4

Vapor Pressure: 0.000082 mm Hg

Vapor Density: No data

Evaporation Rate: Negligible

Viscosity: Not available.

Boiling Point: 211 deg C @ 20.00mm Hg

Freezing/Melting Point: 158 - 160 deg C

Decomposition Temperature: Not available.

Solubility: Soluble.

Specific Gravity/Density: 1.4400g/cm³

Molecular Formula: C₇H₆O₃

Molecular Weight: 138.12

Section 10 - Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures. Moisture sensitive. Light sensitive. Darkens on exposure to light.

Conditions to Avoid: High temperatures, incompatible materials, light, moisture, strong oxidants.

Incompatibilities with Other Materials: Oxidizing agents, lead acetate, iron salts, alkalis, iodine, spirit nitrous ether.

Hazardous Decomposition Products: Carbon monoxide, irritating and toxic fumes and gases, carbon dioxide.

Hazardous Polymerization: Will not occur.

Section 11 - Toxicological Information

RTECS#:

CAS# 69-72-7: VO0525000

LD50/LC50:

CAS# 69-72-7:

Draize test, rabbit, eye: 100 mg Severe;

Draize test, rabbit, skin: 500 mg/24H Mild;

Inhalation, rat: LC50 = >900 mg/m³/1H;

Oral, mouse: LD50 = 480 mg/kg;

Oral, rabbit: LD50 = 1300 mg/kg;

Oral, rat: LD50 = 891 mg/ka;

Skin, rabbit: LD50 = >10³ gm/kg;
Skin, rat: LD50 = >2 gm/kg;

Carcinogenicity:

CAS# 69-72-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found

Teratogenicity: Oral, rat: TDLo = 1050 mg/kg (female 8-14 day(s) after conception) Specific Developmental Abnormalities - Central Nervous System and craniofacial (including nose and tongue) and musculoskeletal system.; Oral, rat: TDLo = 350 mg/kg (female 8-14 day(s) after conception) Effects on Embryo or Fetus - extra-embryonic structures (e.g., placenta, umbilical cord).; Oral, mouse: TDLo = 1 gm/kg (female 17 day(s) after conception) Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants) and fetotoxicity (except death, e.g., stunted fetus).

Reproductive Effects: Oral, rat: TDLo = 1050 mg/kg (female 8-14 day(s) after conception) Maternal Effects - uterus, cervix, vagina and Fertility - post-implantation mortality (e.g. dead and/or resorbed implants per total number of implants) and litter size (e.g. # fetuses per litter; measured before birth).; Oral, rat: TDLo = 40 mg/kg (female 20-21 day(s) after conception) Maternal Effects - parturition.

Mutagenicity: Mutation in Microorganisms: Saccharomyces cerevisiae = 1 mmol/L/3H.; DNA Inhibition: Oral, mouse = 100 mg/kg.

Neurotoxicity: No information found

Other Studies:

Section 12 - Ecological Information

Ecotoxicity: Bacteria: Phytobacterium phosphoreum: EC50 = 214 mg/L; 5 min; Microtox test Adsorption, volatilization and bioconcentration are not expected to be important environmental fate processes. Biodegradation is expected to be the dominant removal mechanism from soil and water. It may also undergo photochemical degradation in sunlit environmental media.

Environmental: In air, it is expected to exist in both the vapor and particulate phase. Vapor phase reaction with photochemically produced hydroxyl radicals may be important (estimated half-life of 1.2 days). Removal by wet and dry deposition can also occur. BOD = 141%, 5 days.

Physical: Rapidly degrades to phenol when heated.

Other: Dangerous to aquatic life in high concentrations.

Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed.

RCRA U-Series: None listed.

Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not regulated	Not Regulated
Hazard Class:		
UN Number:		
Packing Group:		

Section 15 - Regulatory Information

US FEDERAL

TSCA

CAS# 69-72-7 is listed on the TSCA inventory.

Health & Safety Reporting List

None of the chemicals are on the Health & Safety Reporting List.

Chemical Test Rules

None of the chemicals in this product are under a Chemical Test Rule.

Section 12b

None of the chemicals are listed under TSCA Section 12b.

TSCA Significant New Use Rule

None of the chemicals in this material have a SNUR under TSCA.

CERCLA Hazardous Substances and corresponding RQs

None of the chemicals in this material have an RQ.

SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

SARA Codes

CAS # 69-72-7: immediate, delayed.

Section 313 No chemicals are reportable under Section 313.

Clean Air Act:

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

Clean Water Act:

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

STATE

CAS# 69-72-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

European/International Regulations**European Labeling in Accordance with EC Directives****Hazard Symbols:**

XN

Risk Phrases:

R 22 Harmful if swallowed.

R 37/38 Irritating to respiratory system and skin.

R 41 Risk of serious damage to eyes.

Safety Phrases:

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

WGK (Water Danger/Protection)

CAS# 69-72-7: 1

Canada - DSL/NDSL

CAS# 69-72-7 is listed on Canada's DSL List.

Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

Canadian Ingredient Disclosure List

CAS# 69-72-7 is listed on the Canadian Ingredient Disclosure List.

Section 16 - Additional Information
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MSDS Creation Date: 6/10/1999

Revision #3 Date: 10/26/2004

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