Material Safety Data Sheet
Salicylic Acid

ACC# 20315

Section 1 - Chemical Product and Company Identification

**MSDS Name:** Salicylic Acid  
**Catalog Numbers:** S78056, S78056-1, A275, A275-12, A275-212, A275-500, A275250LB, A277 500, A277-500, A277500, NC9747210, S780561, SEA277100LB  
**Synonyms:** Benzoic acid, 2-hydroxy-; o-Hydroxybenzoic acid; 2-Hydroxybenzoic acid; Orthohydroxybenzoic 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

<table>
<thead>
<tr>
<th>CAS#</th>
<th>Chemical Name</th>
<th>Percent</th>
<th>EINECS/ELINCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>69-72-7</td>
<td>Salicylic acid</td>
<td>ca. 100</td>
<td>200-712-3</td>
</tr>
</tbody>
</table>

**Hazard Symbols:** XN  
**Risk Phrases:** 22 36/38

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

Appearance: white. **Warning!** Contact with skin causes irritation and possible burns, especially if the skin is wet or moist. Light sensitive. Moisture sensitive. May be harmful if swallowed. May cause central nervous system effects. Causes severe eye irritation. May cause reproductive and fetal effects. Causes digestive and respiratory tract irritation.  
**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 soap and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse.

**Ingestion:** If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid. Induce vomiting by giving one teaspoon of Syrup of Ipecac.

**Inhalation:** Get medical aid immediately. Remove from exposure 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.

### 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.

http://avogadro.chem.iastate.edu/MSDS/salicylic_acid.htm
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.

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>ACGIH</th>
<th>NIOSH</th>
<th>OSHA - Final PELs</th>
</tr>
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<tbody>
<tr>
<td>Salicylic acid</td>
<td>none listed</td>
<td>none listed</td>
<td>none listed</td>
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</table>

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 a respirator's 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
Autoignition Temperature: 535 deg C (995.00 deg F)
Flash Point: 157 deg C (314.60 deg F)
Decomposition Temperature: Not available.
NFPA Rating: (estimated) Health: 0; Flammability: 1; Reactivity: 0
Explosion Limits, Lower: 1.1 % @ 392F
Upper: Not available.
Solubility: Soluble.
Specific Gravity/Density: 1.4400g/cm3
Molecular Formula: C7H6O3
Molecular Weight: 138.12

Section 10 - Stability and Reactivity

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/kg;
Skin, rabbit: LD50 = >10 gm/kg;
Skin, rat: LD50 = >2 gm/kg;

Carcinogenicity:
CAS# 69-72-7: Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.

Epidemiology: No information available.

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.

Neurotoxicity: No information available.

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

Other Studies: Standard Draize Test: Administration onto the skin (rabbit) = 500 mg/24Hr (Mild). Standard Draize Test: Administrat ion into the eye (rabbit) = 100 mg (Severe).

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.

http://avogadro.chem.iastate.edu/MSDS/salicylic_acid.htm
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

<table>
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<tr>
<th>US DOT</th>
<th>IATA</th>
<th>RID/ADR</th>
<th>IMO</th>
<th>Canada TDG</th>
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<td>UN Number:</td>
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<tr>
<td>Packing Group:</td>
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### 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.

**SARA**

**Section 302 (RQ)**
None of the chemicals in this material have an RQ.
Section 302 (TPQ)
None of the chemicals in this product have a TPQ.

SARA Codes
CAS # 69-72-7: acute, chronic.

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 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 36/38 Irritating to eyes and skin.

Safety Phrases:
S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 28 After contact with skin, wash immediately with...
S 39 Wear eye/face protection.

WGK (Water Danger/Protection)
CAS# 69-72-7: 1

Canada
CAS# 69-72-7 is listed on Canada's DSL List. CAS# 69-72-7 is listed on Canada's DSL List. This product has a WHMIS classification of D2B.
CAS# 69-72-7 is listed on Canada's Ingredient Disclosure List.

Exposure Limits

Section 16 - Additional Information

MSDS Creation Date: 6/10/1999
Revision #1 Date: 8/02/2000
The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.

http://avogadro.chem.iastate.edu/MSDS/salicylic_acid.htm