

# Material Safety Data Sheet

HAZARD WARNINGS	RISK PHRASES	PROTECTIVE CLOTHING
	Irritating to skin, eyes, and the respiratory system. Harmful compound, minimize exposure. Light sensitive.	

## Section I. Chemical Product and Company Identification

Chemical Name	<b>2-Hydroxybenzoic Acid</b>		
Catalog Number	H0206	Supplier	TCl America 9211 N. Harborage St. Portland OR 1-800-423-8616
Synonym	Salicylic Acid		
Chemical Formula	HOC <sub>6</sub> H <sub>4</sub> COOH		
CAS Number	69-72-7	In case of Emergency Call	<b>Chemtrec®</b> <b>(800) 424-9300 (U.S.)</b> <b>(703) 527-3887 (International)</b>

## Section II. Composition and Information on Ingredients

Chemical Name	CAS Number	Percent (%)	TLV/PEL	Toxicology Data
2-Hydroxybenzoic Acid	69-72-7	Min. 99.5 (T)	Not available.	Rat LD <sub>50</sub> (oral) 891 mg/kg Rabbit LD <sub>50</sub> (dermal) >10000 mg/kg Rat LC <sub>50</sub> (inhalation) >900 mg/kg Mouse LD <sub>50</sub> (intravenous) 184 mg/kg Rat LD <sub>50</sub> (dermal) >2000 mg/kg

## Section III. Hazards Identification

Acute Health Effects	Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.
Chronic Health Effects	<b>CARCINOGENIC EFFECTS</b> : Not available. <b>MUTAGENIC EFFECTS</b> : Not available. <b>TERATOGENIC EFFECTS</b> : Not available. <b>DEVELOPMENTAL TOXICITY</b> : Reproductive Effects. Rat TDLo Oral 40 mg/kg, female 20-21 days of pregnancy TOXIC Effects: Maternal Effects - Parturition Rat TDLo Oral 350 mg/kg, female 8-14 days of pregnancy TOXIC Effects: Effects on Embryo or Fetus - Extra embryonic structures Rat TDLo Subcutaneous 380 mg/kg, female 9 days of pregnancy TOXIC Effects: Effects on Fertility - Post implantatin mortality

## Section IV. First Aid Measures

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. Get medical attention.
Skin Contact	In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.
Inhalation	If the victim is not breathing, perform mouth-to-mouth resuscitation. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, oxygen can be administered. Seek medical attention if respiration problems do not improve.
Ingestion	INDUCE VOMITING by sticking finger in throat. Lower the head so that the vomit will not reenter the mouth and throat. Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Examine the lips and mouth to ascertain whether the tissues are damaged, a possible indication that the toxic material was ingested; the absence of such signs, however, is not conclusive.

<b>Section V. Fire and Explosion Data</b>			
Flammability	May be combustible at high temperature.	Auto-Ignition	570 °C (1058 °F)
Flash Points	157 °C (314.6 °F).	Flammable Limits	LOWER: 1.1%
Combustion Products	These products are toxic carbon oxides (CO, CO <sub>2</sub> ).		
Fire Hazards	Not available.		
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 Fighting Media and Instructions	SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. DO NOT use water jet. Consult with local fire authorities before attempting large scale fire-fighting operations.		

<b>Section VI. Accidental Release Measures</b>	
Spill Cleanup Instructions	Harmful material. Irritating material. Light sensitive material. Use a shovel to put the material into a convenient waste disposal container. Finish cleaning the spill by rinsing any contaminated surfaces with copious amounts of water. Consult federal, state, and/or local authorities for assistance on disposal.

<b>Section VII. Handling and Storage</b>	
Handling and Storage Information	HARMFUL. IRRITANT. LIGHT SENSITIVE. Keep away from heat. Mechanical exhaust required. When not in use, tightly seal the container and store in a dry, cool place. Avoid excessive heat and light. Do not breathe dust. Always store away from incompatible compounds such as oxidizing agents, alkalis (bases).

<b>Section VIII. Exposure Controls/Personal Protection</b>	
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	Splash goggles. Lab coat. Dust respirator. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. Be sure to use a MSHA/NIOSH approved respirator or equivalent.
	
Exposure Limits	Not available.

<b>Section IX. Physical and Chemical Properties</b>			
Physical state @ 20°C	Solid. (White, Needles.)	Solubility	Soluble (wt%): water 0.20 (20 °), 2.21 (80 °); carbon tetrachloride 0.262 (25 °); benzene 0.775 (25 °); propanol 27.36 (21 °); absolute ethanol 34.87 (21 °); acetone 396 (23 °). Very slightly soluble in water. Soluble in Ether, Acetone, Alcohol. Slightly soluble in chloroform.
Specific Gravity	1.44 (water=1)	Partition Coefficient	Log K <sub>ow</sub> : 2.21
Molecular Weight	138.12	Vapor Pressure	0.01 Pa at 25 °C
Boiling Point	211 °C (411.8 °F) @ 20 mmHg	Vapor Density	4.8 (Air = 1)
Melting Point	159 °C (318.2 °F)	Volatility	Not available.
Refractive Index	Not available.	Odor	Not available.
Critical Temperature	Not available.	Taste	Not available.
Viscosity	Not available.		

<b>Section X. Stability and Reactivity Data</b>	
Stability	This material is stable if stored under proper conditions. (See Section VII for instructions)
Conditions of Instability	Avoid excessive heat and light.
Incompatibilities	Reactive with strong oxidizing agents, strong alkalis (bases), iodine, iron and iron salts.

**Section XI. Toxicological Information**

RTECS Number	VO0525000
Routes of Exposure	Eye Contact. Ingestion. Inhalation.
Toxicity Data	Rat LD <sub>50</sub> (oral) 891 mg/kg Rabbit LD <sub>50</sub> (dermal) >10000 mg/kg Rat LC <sub>50</sub> (inhalation) >900 mg/kg Mouse LD <sub>50</sub> (intravenous) 184 mg/kg Rat LD <sub>50</sub> (dermal) >2000 mg/kg
Chronic Toxic Effects	<b>CARCINOGENIC EFFECTS</b> : Not available. <b>MUTAGENIC EFFECTS</b> : Not available. <b>TERATOGENIC EFFECTS</b> : Not available. <b>DEVELOPMENTAL TOXICITY</b> : Reproductive Effects. Rat TDLo Oral 40 mg/kg, female 20-21 days of pregnancy TOXIC Effects: Maternal Effects - Parturition Rat TDLo Oral 350 mg/kg, female 8-14 days of pregnancy TOXIC Effects: Effects on Embryo or Fetus - Extra embryonic structures Rat TDLo Subcutaneous 380 mg/kg, female 9 days of pregnancy TOXIC Effects: Effects on Fertility - Post implantatin mortality
Acute Toxic Effects	Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. Harmful if ingested or inhaled. Minimize exposure to this material. Severe overexposure can result in injury or death. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

**Section XII. Ecological Information**

Ecotoxicity	Not available.
Environmental Fate	Salicylic acid occurs naturally in many microorganisms and plants. It may be involved in photochemical polymerization of fulvic and humic materials, of which it is a minor constituent. Anthropogenic releases may occur via effluents at sites where it is produced or used in the manufacture of aspirin, foundry and phenolic resins, rubber retarders, dyestuffs and medicines. Salicylic acid and the salicylate ion will occur in pH dependent proportions. Above pH 5, virtually all salicylic acid will exist as the salicylate ion. 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. 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. A probable human exposure would be occupational exposure. Common non-occupational exposures include ingesting contaminated drinking water supplies and certain foods and beverages such as fruits, fruit juices and wines. Infants may ingest it with milk from nursing mothers that have consumed aspirin. Exposures can occur in urban atmospheres and during recreational activities at contaminated waterways.

**Section XIII. Disposal Considerations**

Waste Disposal	Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustibile solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.
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**Section XIV. Transport Information**

DOT Classification	Not a DOT controlled material (United States).
PIN Number	Not applicable.
Proper Shipping Name	Not applicable.
Packing Group (PG)	Not applicable.
DOT Pictograms	

**Section XV. Other Regulatory Information and Pictograms**

TSCA Chemical Inventory (EPA)	This compound is <b>ON</b> the EPA Toxic Substances Control Act (TSCA) inventory list.
WHMIS Classification (Canada)	On DSL
EINECS Number (EEC)	200-712-3
EEC Risk Statements	R20/21/22- Harmful by inhalation, in contact with skin and if swallowed. R36/37/38- Irritating to eyes, respiratory system and skin.

**Continued on Next Page****Emergency phone number (800) 424-9300**

Japanese Regulatory Data ENCS No. 3-1640

**Section XVI. Other Information****Version 1.0****Validated on 7/24/2006.****Printed 7/24/2006.****Notice to Reader**

TCI laboratory chemicals are for research purposes only and are NOT intended for use as drugs, food additives, household, or pesticides. The information herein is believed to be correct, but does not claim to be all inclusive and should be used only as a guide. Neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All chemical reagents must be handled with the recognition that their chemical, physiological, toxicological, and hazardous properties have not been fully investigated or determined. All chemical reagents should be handled only by individuals who are familiar with their potential hazards and who have been fully trained in proper safety, laboratory, and chemical handling procedures. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist. Our MSDS sheets are based only on data available at the time of shipping and are subject to change without notice as new information is obtained. Avoid long storage periods since the product is subject to degradation with age and may become more dangerous or hazardous. It is the responsibility of the user to request updated MSDS sheets for products that are stored for extended periods. Disposal of unused product must be undertaken by qualified personnel who are knowledgeable in all applicable regulations and follow all pertinent safety precautions including the use of appropriate protective equipment (e.g. protective goggles, protective clothing, breathing equipment, facial mask, fume hood). For proper handling and disposal, always comply with federal, state, and local regulations.

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