

## Material Safety Data Sheet

Date Printed: 17/MAY/2005

Date Updated: 25/MAR/2004

Version 1.1

According to 91/155/EEC

Classified as Hazardous according to the criteria of EU Annex 1 and NOHSC.

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1 - Product and Company Information

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Product Name	SALICYLIC ACID, 99+%
Product Number	W398500
Company	Sigma-Aldrich Pty, Ltd Unit 2, 14 Anella Avenue Castle Hill NSW 1765 Australia
Technical Phone #	+61 2 9841 0555
Fax	+61 2 9841 0500
Emergency Phone #	+61 2 9841 0566

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2 - Composition/Information on Ingredients

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Product Name	CAS #	EC no	Annex I Index Number
SALICYLIC ACID FOR MANUFACTURING	69-72-7	200-712-3	None
Formula	C7H6O3		
Molecular Weight	138.12 AMU		
Synonyms	Acido o-idrossibenzoico (Italian) * Acido salicilico (Italian) * Benzoic acid, 2-hydroxy- * o-Hydroxybenzoic acid * 2-Hydroxybenzoic acid * Keralyt * Kyselina 2-hydroxybenzoova (Czech) * Kyselina salicylova (Czech) * Orthohydroxybenzoic acid * Retarder W * SA * SAX * Verrugon		

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3 - Hazards Identification

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SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT  
Harmful if swallowed. Risk of serious damage to eyes.

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4 - First Aid Measures

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## AFTER INHALATION

If inhaled, remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

## AFTER SKIN CONTACT

In case of skin contact, flush with copious amounts of water for at least 15 minutes. Remove contaminated clothing and shoes. Call a physician.

## AFTER EYE CONTACT

In case of contact with eyes, flush with copious amounts of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

#### AFTER INGESTION

If swallowed, wash out mouth with water provided person is conscious. Call a physician.

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### 5 - Fire Fighting Measures

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#### EXTINGUISHING MEDIA

Suitable: Water spray. Carbon dioxide, dry chemical powder, or appropriate foam.

#### SPECIAL RISKS

Specific Hazard(s): Emits toxic fumes under fire conditions.

#### SPECIAL PROTECTIVE EQUIPMENT FOR FIREFIGHTERS

Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes.

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### 6 - Accidental Release Measures

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PERSONAL PRECAUTION PROCEDURES TO BE FOLLOWED IN CASE OF LEAK OR SPILL  
Evacuate area.

#### PROCEDURE(S) OF PERSONAL PRECAUTION(S)

Wear respirator, chemical safety goggles, rubber boots, and heavy rubber gloves.

#### METHODS FOR CLEANING UP

Sweep up, place in a bag and hold for waste disposal. Avoid raising dust. Ventilate area and wash spill site after material pickup is complete.

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### 7 - Handling and Storage

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#### HANDLING

Directions for Safe Handling: Do not breathe dust. Avoid contact with eyes, skin, and clothing. Avoid prolonged or repeated exposure.

#### STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Light sensitive.

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### 8 - Exposure Controls / Personal Protection

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#### ENGINEERING CONTROLS

Safety shower and eye bath. Mechanical exhaust required.

#### GENERAL HYGIENE MEASURES

Wash thoroughly after handling.

#### PERSONAL PROTECTIVE EQUIPMENT

Respiratory Protection: Government approved respirator.  
Hand Protection: Compatible chemical-resistant gloves.  
Eye Protection: Chemical safety goggles.

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### 9 - Physical and Chemical Properties

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#### Appearance

Physical State: Solid  
Color: White  
Form: Fine crystals

Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	211 °C	20 mmHg
MP/MP Range	158 °C	
Flash Point	157 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	N/A	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	1 mmHg	114 °C
SG/Density	1.44 g/cm3	
Partition Coefficient	N/A	
Viscosity	N/A	
Vapor Density	4.8 g/l	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	N/A	
Decomposition Temp.	N/A	
Solvent Content	N/A	
Water Content	N/A	
Surface Tension	N/A	
Conductivity	N/A	
Miscellaneous Data	N/A	
Solubility	Solvent: 0.1 g/ml EtOH 96% Clear	

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## 10 - Stability and Reactivity

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### STABILITY

Stable: Stable.

Conditions to Avoid: Light.

Materials to Avoid: Strong oxidizing agents, Strong bases, Iodine  
Iron and iron salts.

### HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

### HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

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## 11 - Toxicological Information

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RTECS NUMBER: VO0525000

### ACUTE TOXICITY

LD50

Oral

Rat

891 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

Behavioral:Muscle weakness.

LC50

Inhalation

Rat

> 900 mg/m3

1H

LD50

Skin  
Rat  
> 2000 mg/kg  
Remarks: Liver:Other changes. Skin and Appendages: Other: Hair.

LD50  
Intraperitoneal  
Rat  
157 MG/KG  
Remarks: Behavioral:Somnolence (general depressed activity).  
Behavioral:Tremor. Nutritional and Gross Metabolic:Changes  
in:Body temperature decrease.

LD50  
Oral  
Mouse  
480 mg/kg

LD50  
Intraperitoneal  
Mouse  
300 MG/KG  
Remarks: Behavioral:Somnolence (general depressed activity).  
Lungs, Thorax, or Respiration:Respiratory depression.

LD50  
Intravenous  
Mouse  
184 MG/KG  
Remarks: Behavioral:Convulsions or effect on seizure threshold.

LD50  
Oral  
Cat  
400 mg/kg

LD50  
Oral  
Rabbit  
1300 mg/kg

LD50  
Skin  
Rabbit  
> 10000 mg/kg

LC50  
Inhalation  
Mammal  
> 300 mg/m3

#### IRRITATION DATA

Skin  
Rabbit  
500 mg  
24H  
Remarks: Mild irritation effect

Eyes  
Rabbit  
100 mg

Remarks: Severe irritation effect

#### SIGNS AND SYMPTOMS OF EXPOSURE

Mild chronic salicylate intoxication is termed salicylism. Symptoms include: headache, dizziness, ringing in the ears, difficulty in hearing, dimness of vision, mental confusion, lassitude, drowsiness, sweating, thirst, hyperventilation, nausea, vomiting, and occasionally diarrhea. A more severe degree of salicylate intoxication is characterized by more pronounced CNS disturbances (including generalized convulsions and coma), skin eruptions, and marked alterations in acid-base balance.

#### ROUTE OF EXPOSURE

Skin Contact: May cause skin irritation.  
Skin Absorption: May be harmful if absorbed through the skin.  
Eye Contact: Causes severe eye irritation.  
Inhalation: May be harmful if inhaled. Material may be irritating to mucous membranes and upper respiratory tract.  
Ingestion: Harmful if swallowed.

#### TARGET ORGAN INFORMATION

Central nervous system. Blood.

#### CHRONIC EXPOSURE - MUTAGEN

Mouse  
100 MG/KG  
Oral  
DNA inhibition  
  
ZNEG  
Histidine reversion (Ames)

#### CHRONIC EXPOSURE - TERATOGEN

Species: Rat  
Dose: 1050 MG/KG  
Route of Application: Oral  
Exposure Time: (8-14D PREG)  
Result: Specific Developmental Abnormalities: Central nervous system. Specific Developmental Abnormalities: Craniofacial (including nose and tongue). Specific Developmental Abnormalities: Musculoskeletal system.

Species: Rat  
Dose: 700 MG/KG  
Route of Application: Oral  
Exposure Time: (8-14D PREG)  
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Musculoskeletal system.

Species: Rat  
Dose: 350 MG/KG  
Route of Application: Oral  
Exposure Time: (8-14D PREG)  
Result: Effects on Embryo or Fetus: Extra embryonic structures (e.g., placenta, umbilical cord).

Species: Mouse  
Dose: 500 MG/KG

Route of Application: Oral  
Exposure Time: (9D PREG)  
Result: Specific Developmental Abnormalities: Musculoskeletal system.

#### CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat  
Dose: 40 MG/KG  
Route of Application: Oral  
Exposure Time: (20-21D PREG)  
Result: Maternal Effects: Parturition.

Species: Rat  
Dose: 1050 MG/KG  
Route of Application: Oral  
Exposure Time: (8-14D PREG)  
Result: Maternal Effects: Uterus, cervix, vagina. Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Fertility: Litter size (e.g.; # fetuses per litter; measured before birth).

Species: Rat  
Dose: 380 MG/KG  
Route of Application: Subcutaneous  
Exposure Time: (9D PREG)  
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Other developmental abnormalities.

Species: Mouse  
Dose: 1 GM/KG  
Route of Application: Oral  
Exposure Time: (17D PREG)  
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants). Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus).

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#### 12 - Ecological Information

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No data available.

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#### 13 - Disposal Considerations

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##### SUBSTANCE DISPOSAL

Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state, and local environmental regulations.

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#### 14 - Transport Information

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##### RID/ADR

Non-hazardous for road transport.

##### IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

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## 15 - Regulatory Information

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### CLASSIFICATION AND LABELING ACCORDING TO EU DIRECTIVES

INDICATION OF DANGER: Xn

Harmful.

R-PHRASES: 22 41

Harmful if swallowed. Risk of serious damage to eyes.

S-PHRASES: 26 39

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear eye/face protection.

### COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

SWITZERLAND

SWISS POISON CLASS: 3

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## 16 - Other Information

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### WARRANTY

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Sigma-Aldrich Inc., shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale. Copyright 2005 Sigma-Aldrich Co. License granted to make unlimited paper copies for internal use only.