

Material Safety Data Sheet

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Version 1.2

According to 91/155/EEC

1 - Product and Company Information

Product Name HYDRANAL<R> SALICYLIC ACID
Product Number 37865

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United Kingdom

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2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
SALICYLIC ACID	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

3 - Hazards Identification

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

4 - First Aid Measures

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.

5 - Fire Fighting Measures

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.

6 - Accidental Release Measures

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.

7 - Handling and Storage

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.

8 - Exposure Controls / Personal Protection

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.

9 - Physical and Chemical Properties

Appearance

Physical State: Solid
Color: White
Form: Fine crystals

Property

Value

At Temperature or Pressure

pH	2.4	20 °C
BP/BP Range	211 °C	20 mmHg
MP/MP Range	158 °C	
Flash Point	157 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	570 °C	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	Lower: 1.1 %	
Vapor Pressure	1 mmHg	114 °C
SG/Density	1.44 g/cm3	
Partition Coefficient	Log Kow: 2.21	
Viscosity	N/A	
Vapor Density	4.8 g/l	
Saturated Vapor Conc.	N/A	
Evaporation Rate	N/A	
Bulk Density	800 kg/l	
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	

10 - Stability and Reactivity

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

11 - Toxicological Information

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

Symptoms of exposure may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea, and vomiting. Abdominal pain, nausea, vomiting. symptoms of overexposure may include rapid respiration, diminished mental alertness, faulty judgement, rapid fatigue, nausea, loss of consciousness, coma, and possibly death. Skin rash.

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).

12 - Ecological Information

ECOTOXICOLOGICAL EFFECTS

Test Type: EC50 Daphnia
Species: Daphnia magna
Time: 24 h
Value: 105 mg/l

Test Type: LC50 Fish
Species: Leuciscus idus
Value: 90 mg/l

13 - Disposal Considerations

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.

14 - Transport Information

RID/ADR

Non-hazardous for road transport.

IMDG

Non-hazardous for sea transport.

IATA

Non-hazardous for air transport.

15 - Regulatory Information

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

16 - Other Information

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.

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