

Material Safety Data Sheet

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Version 1.2

According to 91/155/EEC

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

1 - Product and Company Information

Product Name	METHYL SALICYLATE, 99+%
Product Number	240826
Company	Sigma-Aldrich Pty. Ltd. 12 Anella Avenue Castle Hill NSW 2154
Technical Phone #	+61 2 9841 0555 (1800 800 097)
Fax	+61 2 9841 0500 (1800 800 096)
Emergency Phone #	+44 8701906777 (1800 448 465)

2 - Composition/Information on Ingredients

Product Name	CAS #	EC no	Annex I Index Number
METHYL SALICYLATE	119-36-8	204-317-7	None

Formula	C8H8O3
Molecular Weight	152.15 AMU
Synonyms	o-Anisic acid * Benzoic acid, 2-hydroxy-, methyl ester * Betula * Betula oil * Exagien * Flucarmit * Gaultheria oil, artificial * Gaultheria oil * o-Hydroxybenzoic acid, methyl ester * 2-Hydroxybenzoic acid methyl ester * Methylester kyseliny salicylove (Czech) * Methyl o-hydroxybenzoate * Methyl salicylate * Natural wintergreen oil * Oil of wintergreen * Salicylic acid, methyl ester * Synthetic birch sweet oil * Synthetic wintergreen oil * Teaberry oil * Wintergreen oil * Wintergreen oil, synthetic

3 - Hazards Identification

SPECIAL INDICATION OF HAZARDS TO HUMANS AND THE ENVIRONMENT
Harmful if swallowed. Irritating to eyes, respiratory system and skin.

4 - First Aid Measures

AFTER INHALATION

If inhaled, remove to fresh air. If breathing becomes difficult, call a physician.

AFTER SKIN CONTACT

In case of contact, immediately wash skin with soap and copious amounts of water.

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 self-contained breathing apparatus, rubber boots, and heavy rubber gloves.

METHODS FOR CLEANING UP

Absorb on sand or vermiculite and place in closed containers for disposal. Ventilate area and wash spill site after material pickup is complete.

7 - Handling and Storage

HANDLING

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

STORAGE

Conditions of Storage: Keep tightly closed.

SPECIAL REQUIREMENTS: Heat and 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: Clear liquid Color: Slightly yellow-green	
Property	Value	At Temperature or Pressure
pH	N/A	
BP/BP Range	219 - 221 °C	
MP/MP Range	-8 - -7 °C	
Flash Point	96 °C	Method: closed cup
Flammability	N/A	
Autoignition Temp	453 °C	
Oxidizing Properties	N/A	
Explosive Properties	N/A	
Explosion Limits	N/A	
Vapor Pressure	1 mmHg	54 °C
SG/Density	1.184 g/cm3	
Partition Coefficient	Log Kow: 2.55	
Viscosity	N/A	
Vapor Density	5.26 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	Solubility in Water: Insoluble. Other Solvents: ETHANOL, GLACIAL ACETIC ACID	

10 - Stability and Reactivity

STABILITY

Stable: Stable.

Conditions to Avoid: Light. Heat.

Materials to Avoid: Strong bases, Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Products: Carbon monoxide, Carbon dioxide.

HAZARDOUS POLYMERIZATION

Hazardous Polymerization: Will not occur

11 - Toxicological Information

RTECS NUMBER: VO4725000

ACUTE TOXICITY

LDLO

Oral

Man

101 mg/kg

Remarks: Behavioral: Convulsions or effect on seizure threshold.

Gastrointestinal: Nausea or vomiting.

LDLO

Oral

Man

1329 mg/kg

Remarks: Behavioral: Convulsions or effect on seizure threshold.

Behavioral:Coma. Blood: Hemorrhage.

LDLO

Oral

Child

228 mg/kg

Remarks: Lungs, Thorax, or Respiration:Dyspnea.

Gastrointestinal:Nausea or vomiting.

LDLO

Oral

Child

700 mg/kg

Remarks: Peripheral Nerve and Sensation:Flaccid paralysis without anesthesia (usually neuromuscular blockage).

Behavioral:General anesthetic. Lungs, Thorax, or

Respiration:Dyspnea.

LDLO

Oral

Woman

355 mg/kg

Remarks: Behavioral:Coma. Lungs, Thorax, or

Respiration:Respiratory stimulation. Gastrointestinal:Nausea or vomiting.

LDLO

Oral

Infant

1480 mg/kg

Remarks: Lungs, Thorax, or Respiration:Respiratory stimulation.

Gastrointestinal:Nausea or vomiting.

LDLO

Oral

Human

506 mg/kg

LD50

Oral

Rat

887 mg/kg

Remarks: Behavioral:Somnolence (general depressed activity).

LD50

Oral

Mouse

1110 mg/kg

LD50

Oral

Dog

2100 mg/kg

Remarks: Lungs, Thorax, or Respiration:Other changes.

Gastrointestinal:Hypermotility, diarrhea.

Gastrointestinal:Nausea or vomiting.

LD50

Oral

Rabbit

1300 mg/kg

LD50
Oral
Guinea pig
700 mg/kg

IRRITATION DATA

Skin
Rabbit
500 mg
24H
Remarks: Moderate irritation effect

Eyes
Rabbit
500 mg
24H
Remarks: Mild irritation effect

Skin
Guinea pig
100 %
Remarks: Severe irritation effect

Eyes
Guinea pig
100 %
Remarks: Severe irritation effect

SENSITIZATION

Sensitization: Prolonged or repeated exposure may cause allergic reactions in certain sensitive individuals.

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

TARGET ORGAN INFORMATION

Central nervous system. Liver. Ears. Kidneys. Eyes.

CHRONIC EXPOSURE - TERATOGEN

Result: Laboratory experiments have shown teratogenic effects.

Species: Rat
Dose: 500 MG/KG
Route of Application: Intraperitoneal

Exposure Time: (11-12D PREG)
Result: Effects on Embryo or Fetus: Fetotoxicity (except death, e.g., stunted fetus). Specific Developmental Abnormalities: Urogenital system.

Species: Rat
Dose: 500 MG/KG
Route of Application: Subcutaneous
Exposure Time: (10D PREG)
Result: Specific Developmental Abnormalities: Musculoskeletal system. Specific Developmental Abnormalities: Body wall. Specific Developmental Abnormalities: Central nervous system.

Species: Rat
Dose: 500 MG/KG
Route of Application: Subcutaneous
Exposure Time: (10D PREG)
Result: Specific Developmental Abnormalities: Hepatobiliary system. Specific Developmental Abnormalities: Eye, ear. Specific Developmental Abnormalities: Craniofacial (including nose and tongue).

Species: Hamster
Dose: 1750 MG/KG
Route of Application: Oral
Exposure Time: (7D PREG)
Result: Specific Developmental Abnormalities: Central nervous system.

Species: Hamster
Dose: 5250 MG/KG
Route of Application: Skin
Exposure Time: (7D PREG)
Result: Specific Developmental Abnormalities: Central nervous system.

CHRONIC EXPOSURE - REPRODUCTIVE HAZARD

Species: Rat
Dose: 36450 MG/KG
Route of Application: Oral
Exposure Time: (MULTIGENERATIONS)
Result: Effects on Newborn: Live birth index (# fetuses per litter; measured after birth). Effects on Newborn: Viability index (e.g., # alive at day 4 per # born alive). Effects on Newborn: Weaning or lactation index (e.g., # alive at weaning per # alive at day 4).

Species: Rat
Dose: 400 MG/KG
Route of Application: Intraperitoneal
Exposure Time: (12D PREG)
Result: Effects on Fertility: Post-implantation mortality (e.g., dead and/or resorbed implants per total number of implants).

12 - Ecological Information

No data available.

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 36/37/38

Harmful if swallowed. Irritating to eyes, respiratory system and skin.

S-PHRASES: 26 36

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Wear suitable protective clothing.

COUNTRY SPECIFIC INFORMATION

Germany

WGK: 1

SWITZERLAND

SWISS POISON CLASS: 4

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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