

MSDS Number: M7257 \* \* \* \* \* Effective Date: 08/02/05 \* \* \* \* \* Supercedes: 05/08/03



# **METHYL SALICYLATE**

### **1. Product Identification**

Synonyms: O-Hydroxybenzoic acid, methyl ester; synthetic wintergreen oil; Betula oil; salicylic acid, methyl ester CAS No.: 119-36-8 Molecular Weight: 152.15 Chemical Formula: 2-HOC6H4COOCH3 Product Codes: J.T. Baker: 2700 Mallinckrodt: 2064

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Benzoic Acid, 2-hydroxy-, Methyl Ester	119-36-8	98 - 100%	Yes

### 3. Hazards Identification

### **Emergency Overview**

http://www.jtbaker.com/msds/englishhtml/M7257.htm



### WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS THE KIDNEYS AND CENTRAL NERVOUS SYSTEM.

### SAF-T-DATA<sup>(tm)</sup> Ratings (Provided here for your convenience)

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Health Rating: 2 - Moderate (Life) Flammability Rating: 1 - Slight Reactivity Rating: 0 - None Contact Rating: 3 - Severe Lab Protective Equip: GOGGLES & SHIELD; LAB COAT & APRON; VENT HOOD; PROPER GLOVES Storage Color Code: Green (General Storage)

#### **Potential Health Effects**

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#### Inhalation:

Inhalation can cause severe irritation of mucous membranes and upper respiratory tract. Symptoms may include burning sensation, coughing, wheezing, laryngitis, shortness of breath, headache, nausea and vomiting. High concentrations may cause lung damage.

#### **Ingestion:**

Ingestion of sizable amounts can cause "salicylism", as evidenced by abdominal pain, vomiting, increased respiration, and mental disturbances. Fatalities resulting from respiratory or cardiovascular failure are known. Reported lethal dose in human adult of 30 mls.

#### **Skin Contact:**

May cause irritation, and skin rashes in sensitive individuals. Skin absorption has reportedly occurred, but toxic levels are reached only when large skin areas are covered with the drug in a suitable base (e. g., lanolin).

### **Eye Contact:**

Irritant to eye and surrounding membranes. Can be severe with permanent damage.

### **Chronic Exposure:**

Central nervous system disturbances such as rapid breathing, confusion and even convulsions may develop. Kidneys and pancreas can be affected by prolonged ingestion. Aggravation of Pre-existing Conditions:

Persons with pre-existing skin disorders or eye problems, or impaired kidney or respiratory function may be more susceptible to the effects of the substance.

### 4. First Aid Measures

### Inhalation:

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

#### Ingestion:

Induce vomiting immediately as directed by medical personnel. Never give anything by



mouth to an unconscious person. Call a physician immediately.

### Skin Contact:

Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention. Wash clothing before reuse. Thoroughly clean shoes before reuse.

### **Eye Contact:**

Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

### 5. Fire Fighting Measures

Fire:

Flash point: 96C (205F)
Autoignition temperature: 454.4C (849F)
Moderate fire hazard when exposed to heat or flame.
Explosion:
Above the flash point, explosive vapor-air mixtures may be formed.
Fire Extinguishing Media:
Dry chemical, foam or carbon dioxide.
Special Information:
In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Water spray may be used to keep fire exposed containers cool.

### 6. Accidental Release Measures

Ventilate area of leak or spill. Wear appropriate personal protective equipment as specified in Section 8. Contain and recover liquid when possible. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

## 7. Handling and Storage

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.



## 8. Exposure Controls/Personal Protection

#### **Airborne Exposure Limits:**

### None established.

### Ventilation System:

A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

### **Personal Respirators (NIOSH Approved):**

For conditions of use where exposure to the substance is apparent, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

### **Skin Protection:**

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

#### **Eye Protection:**

Use chemical safety goggles and/or a full face shield where splashing is possible. Maintain eye wash fountain and quick-drench facilities in work area.

### 9. Physical and Chemical Properties

### Appearance:

Clear, practically colorless liquid. Odor: Characteristic odor. Solubility: Sparingly soluble in water. **Specific Gravity:** 1.180-1.185 pH: No information found. % Volatiles by volume @ 21C (70F): 100 **Boiling Point:** 222.2C (432F) **Melting Point:** -8.3C (18F) Vapor Density (Air=1): 5.24 Vapor Pressure (mm Hg): 1 @ 54C (129F) **Evaporation Rate (BuAc=1):** No information found.



## 10. Stability and Reactivity

Stability:
Stable under ordinary conditions of use and storage.
Hazardous Decomposition Products:
May produce acrid smoke and irritating fumes when heated to decomposition.
Hazardous Polymerization:
Will not occur.
Incompatibilities:
Can react with oxidizing materials.
Conditions to Avoid:
Heat, flames, ignition sources and incompatibles.

## **11. Toxicological Information**

Oral rat LD50: 887 mg/kg. Irritation data: skin rabbit 500 mg/24 Hr Moderate; eye rabbit 500 mg/24 Hr Mild. Investigated as a mutagen, reproductive effector.

\Cancer Lists\	NTP Carcinogen		
Ingredient	Known	Anticipated	IARC Category
Benzoic Acid, 2-hydroxy-, Methyl Ester (119-36-8)	No	No	None

### **12. Ecological Information**

#### **Environmental Fate:**

When released into the soil, this material is expected to readily biodegrade. When released into the soil, this material is expected to leach into groundwater. When released into the soil, this material is expected to quickly evaporate. When released into water, this material is expected to readily biodegrade. When released into water, this material is expected to have a half-life between 10 and 30 days. This material has an estimated bioconcentration factor (BCF) of less than 100. This material has a log octanol-water partition coefficient of less than 3.0. This material is not expected to significantly bioaccumulate. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be removed from the atmosphere to a moderate extent by wet deposition. When released into the air, this material is expected to have a half-life between 1 and 10 days. **Environmental Toxicity:** 

No information found.



## 13. Disposal Considerations

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## **14. Transport Information**

Not regulated.

## **15. Regulatory Information**

-----\Chemical Inventory Status - Part 1\-----TSCA EC Japan Australia Ingredient Yes Yes Yes Yes Benzoic Acid, 2-hydroxy-, Methyl Ester (119 - 36 - 8)-----\Chemical Inventory Status - Part 2\-------Canada--Ingredient Korea DSL NDSL Phil. ----- --- --- ----Yes Yes No Yes Benzoic Acid, 2-hydroxy-, Methyl Ester (119 - 36 - 8)------\Federal, State & International Regulations - Part 1\-------SARA 302- ----SARA 313-----RO TPO List Chemical Catq. Ingredient Benzoic Acid, 2-hydroxy-, Methyl Ester No No No No (119 - 36 - 8)-----\Federal, State & International Regulations - Part 2\-------RCRA- -TSCA-CERCLA 261.33 8(d) Ingredient -----No No ----------Benzoic Acid, 2-hydroxy-, Methyl Ester No (119 - 36 - 8)Chemical Weapons Convention: No TSCA 12(b): No CDTA: No SARA 311/312: Acute: Yes Chronic: Yes Fire: No Pressure: No Reactivity: No (Pure / Liquid)

Australian Hazchem Code: None allocated. Poison Schedule: None allocated.

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#### WHMIS:

This MSDS has been prepared according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR.

### **16. Other Information**

NFPA Ratings: Health: 1 Flammability: 1 Reactivity: 0 Label Hazard Warning: WARNING! HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. AFFECTS THE KIDNEYS AND CENTRAL NERVOUS SYSTEM. Label Precautions: Avoid breathing vapor. Keep container closed. Use only with adequate ventilation. Avoid contact with eyes, skin and clothing. Wash thoroughly after handling. Label First Aid: If swallowed, induce vomiting immediately as directed by medical personnel. Never give anything by mouth to an unconscious person. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. In all cases call a physician. **Product Use:** Laboratory Reagent. **Revision Information:** No Changes. **Disclaimer:** 

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