

<b>MSDS</b> <b>Material Safety Data Sheet</b>	
<b>From: Mallinckrodt Baker, Inc.</b> 222 Red School Lane Phillipsburg, NJ 08865	<b>Mallinckrodt</b> <b>CHEMICALS</b>
<b>J.T. Baker</b>	
24 Hour Emergency Telephone: 908-859-2151 CHEMTREC: 1-800-424-9300	
National Response in Canada CANUTEC: 613-996-6666	
Outside U.S. and Canada Chemtrec: 703-527-3887	
<b>NOTE:</b> CHEMTREC, CANUTEC and National Response Center emergency numbers to be used only in the event of chemical emergencies involving a spill, leak, fire, exposure or accident involving chemicals.	
All non-emergency questions should be directed to Customer Service (1-800-582-2537) for assistance.	

## SALICYLALDEHYDE

### 1. Product Identification

**Synonyms:** Benzaldehyde, 2-hydroxy-; salicylal; 2-Formylphenol  
**CAS No.:** 90-02-8  
**Molecular Weight:** 122.13  
**Chemical Formula:** C<sub>6</sub>H<sub>4</sub>OHCHO  
**Product Codes:**  
J.T. Baker: U935  
Mallinckrodt: 1952

### 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent	Hazardous
Salicylaldehyde	90-02-8	90 - 100%	Yes

### 3. Hazards Identification

#### Emergency Overview

**WARNING! MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. COMBUSTIBLE LIQUID AND VAPOR.**

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

Health Rating: 2 - Moderate  
Flammability Rating: 2 - Moderate  
Reactivity Rating: 1 - Slight  
Contact Rating: 2 - Moderate  
Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES; CLASS B EXTINGUISHER  
Storage Color Code: Red (Flammable)

#### Potential Health Effects

Information on the human health effects from exposure to this substance is limited.

##### Inhalation:

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath.

##### Ingestion:

No information found, but compound should be handled as a potential health hazard.

##### Skin Contact:

Causes irritation to skin. Symptoms include redness, itching, and pain. May be absorbed through the skin with possible systemic effects.

##### Eye Contact:

Causes irritation, redness, and pain.

##### Chronic Exposure:

No information found.

##### Aggravation of Pre-existing Conditions:

No information found.

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## 4. First Aid Measures

**Inhalation:**

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

**Ingestion:**

Give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention.

**Skin Contact:**

Wash skin with soap or mild detergent and water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Call a physician.

**Eye Contact:**

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

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## 5. Fire Fighting Measures

**Fire:**

Flash point: 78C (172F) CC

Combustible Liquid.

**Explosion:**

Above the flash point, explosive vapor-air mixtures may be formed. Sealed containers may rupture when heated.

Contact with strong oxidizers may cause fire.

**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.

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## 6. Accidental Release Measures

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. 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!

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## 7. Handling and Storage

Protect against physical damage. Outside or detached storage is preferred. Inside storage should be in a standard flammable liquids storage room or cabinet. Separate from oxidizing materials. Storage and use areas should be No Smoking areas. 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.

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## 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 and engineering controls are not feasible, 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.

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## 9. Physical and Chemical Properties

**Appearance:**  
Clear oily liquid.  
**Odor:**  
Bitter almonds.  
**Solubility:**  
Slightly soluble in water.  
**Specific Gravity:**  
1.17 @ 20C/4C  
**pH:**  
No information found.  
**% Volatiles by volume @ 21C (70F):**  
100  
**Boiling Point:**  
197C (387F)  
**Melting Point:**  
-7C (19F)  
**Vapor Density (Air=1):**  
4.2  
**Vapor Pressure (mm Hg):**  
1 @ 33C (91F)  
**Evaporation Rate (BuAc=1):**  
No information found.

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## 10. Stability and Reactivity

**Stability:**  
Stable under ordinary conditions of use and storage.  
**Hazardous Decomposition Products:**  
Carbon dioxide and carbon monoxide may form when heated to decomposition.  
**Hazardous Polymerization:**  
Will not occur.  
**Incompatibilities:**  
Strong oxidizers.  
**Conditions to Avoid:**  
Heat, flames, ignition sources and incompatibles.

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## 11. Toxicological Information

Oral rat LD50: 520 mg/kg; Skin rabbit LD50: 3000 mg/kg. Investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient	---NTP Carcinogen---		IARC Category
	Known	Anticipated	
Salicylaldehyde (90-02-8)	No	No	None

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## 12. Ecological Information

**Environmental Fate:**  
No information found.  
**Environmental Toxicity:**  
96 Hr LC50 fathead minnow: 2.3 mg/L (flow-through)

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## 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.

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## 14. Transport Information

Not regulated.

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## 15. Regulatory Information

-----\Chemical Inventory Status - Part 1\-----

Ingredient	TSCA	EC	Japan	Australia
Salicylaldehyde (90-02-8)	Yes	Yes	Yes	Yes
-----\Chemical Inventory Status - Part 2\-----				
Ingredient	Korea	DSL	Canada NDSL	Phil.
Salicylaldehyde (90-02-8)	Yes	Yes	No	Yes
-----\Federal, State & International Regulations - Part 1\-----				
Ingredient	-SARA 302- RQ	TPQ	-SARA 313- List	Chemical Catg.
Salicylaldehyde (90-02-8)	No	No	No	No
-----\Federal, State & International Regulations - Part 2\-----				
Ingredient	CERCLA	-RCRA- 261.33	-TSCA- 8(d)	
Salicylaldehyde (90-02-8)	No	No	Yes	

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: No Fire: Yes Pressure: No  
Reactivity: No (Pure / Liquid)

**Australian Hazchem Code:** None allocated.

**Poison Schedule:** None allocated.

#### 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: 2 Reactivity: 0

#### Label Hazard Warning:

WARNING! MAY BE HARMFUL IF SWALLOWED, INHALED OR ABSORBED THROUGH SKIN. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT. COMBUSTIBLE LIQUID AND VAPOR.

#### Label Precautions:

Avoid breathing vapor.

Avoid contact with eyes, skin and clothing.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

Keep away from heat and flame.

#### Label First Aid:

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. If swallowed, give large amounts of water to drink. 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 all cases call a physician.

#### Product Use:

Laboratory Reagent.

#### Revision Information:

No Changes.

#### Disclaimer:

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