

MSDS Number: **T3328** \* \* \* \* \* *Effective Date: 07/16/07* \* \* \* \* \* *Supersedes: 08/24/05*



From: Mallinckrodt Baker, Inc.  
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Phillipsburg, NJ 08865



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  
Chemtree: 703-527-3887

**NOTE:** 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.

# THYMOL

## 1. Product Identification

**Synonyms:** 3-Hydroxy-1-methyl-4-isopropyl benzene; Isopropyl-cresol; Thyme camphor; 2-Isopropyl-5-methyl phenol; 3-Hydroxy-p-cymene

**CAS No.:** 89-83-8

**Molecular Weight:** 150.22

**Chemical Formula:** C<sub>10</sub>H<sub>14</sub>O

**Product Codes:**

J.T. Baker: 4128

Mallinckrodt: 8528

## 2. Composition/Information on Ingredients

Ingredient	CAS No	Percent
Hazardous		
-----	-----	-----
-----		
Thymol	89-83-8	90 - 100%
Yes		

### 3. Hazards Identification

#### Emergency Overview

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**WARNING! HARMFUL IF SWALLOWED. MAY BE HARMFUL IF INHALED. AFFECTS CENTRAL NERVOUS SYSTEM. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.**

**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: 1 - Slight

Contact Rating: 2 - Moderate

Lab Protective Equip: GOGGLES; LAB COAT; VENT HOOD; PROPER GLOVES

Storage Color Code: Green (General Storage)

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#### Potential Health Effects

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This compound resembles phenol in its systemic actions, but is less toxic because it is almost insoluble.

##### **Inhalation:**

Causes irritation to the respiratory tract. Symptoms may include coughing, shortness of breath. May be absorbed into the bloodstream with symptoms similar to ingestion.

##### **Ingestion:**

Produces abdominal pain, nausea, vomiting, central hyperactivity (e.g., talkativeness), and occasionally convulsions, coma and cardiac and respiratory collapse. Oils and alcohols may promote absorption into the body. May cause kidney and liver damage.

##### **Skin Contact:**

Causes irritation to skin. Symptoms include redness, itching, and pain.

##### **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. Get medical attention.

**Ingestion:**

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

**Skin Contact:**

Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention if irritation develops.

**Eye Contact:**

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

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## 5. Fire Fighting Measures

**Fire:**

As with most organic solids, fire is possible at elevated temperatures or by contact with an ignition source.

**Explosion:**

Not an explosion hazard under normal conditions of storage and use, but fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

**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

Remove all sources of ignition. Ventilate area of leak or spill. Keep unnecessary and unprotected people away from area of spill. Wear appropriate personal protective equipment as specified in Section 8. Spills: Pick up and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

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## 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. Isolate from incompatible substances.

Containers of this material may be hazardous when empty since they retain product residues (dust, solids); 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 dust or mist is apparent and engineering controls are not feasible, a particulate respirator (NIOSH type N95 or better filters) may be worn. If oil particles (e.g. lubricants, cutting fluids, glycerine, etc.) are present, use a NIOSH type R or P filter. For emergencies or instances where the exposure levels are not known, use a full-face positive-pressure, air-supplied respirator. **WARNING:** Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.

### **Skin Protection:**

Wear protective gloves and clean body-covering clothing.

### **Eye Protection:**

Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

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## 9. Physical and Chemical Properties

### **Appearance:**

Small colorless granules.

### **Odor:**

Thyme-like odor.

### **Solubility:**

0.1g/100g water.

### **Specific Gravity:**

0.97 @ 25C/4C

### **pH:**

No information found.

### **% Volatiles by volume @ 21C (70F):**

0

### **Boiling Point:**

233C (451F)

### **Melting Point:**

48 - 51C (118 - 124F)

**Vapor Density (Air=1):**

No information found.

**Vapor Pressure (mm Hg):**

1 @ 64C (147F)

**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:**

Acetanilide, antipyrine, camphor, chorohydrate, strong oxidizers, spirit nitrous ether, menthol, quinine sulfate, salol, and urethane.

**Conditions to Avoid:**

Heat, flames, ignition sources and incompatibles.

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## 11. Toxicological Information

LD50: 980 mg/kg. Investigated as a mutagen, reproductive effector.

-----\Cancer Lists\-----			
Ingredient Category	---NTP Carcinogen---		IARC
	Known	Anticipated	
Thymol (89-83-8)	No	No	None

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## 12. Ecological Information

**Environmental Fate:**

No information found.

**Environmental Toxicity:**

Dangerous to the environment. Toxic to aquatic organisms; may cause long term adverse effects in the aquatic environment.

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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

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-----\Chemical Inventory Status - Part 1\-----
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Ingredient                TSCA  EC    Japan
Australia
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Thymol (89-83-8)         Yes   Yes   Yes    Yes
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```
-----\Chemical Inventory Status - Part 2\-----
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Ingredient                Korea  --Canada--
                        DSL    NDSL   Phil.
-----
Thymol (89-83-8)         Yes   Yes   No     Yes
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-----\Federal, State & International Regulations - Part 1\-----
--
                        -SARA 302-    -----SARA 313-----
--
Ingredient                RQ    TPQ    List  Chemical
Catg.
-----
Thymol (89-83-8)         No    No     No     No
```

```
-----\Federal, State & International Regulations - Part 2\-----
--
Ingredient                CERCLA    -RCRA-    -TSCA-
                        261.33   8 (d)
-----
Thymol (89-83-8)         No        No        No
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Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: No Fire: No Pressure: No  
Reactivity: No (Pure / Solid)

**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.

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## 16. Other Information

**NFPA Ratings:** Health: 2 Flammability: 1 Reactivity: 0

**Label Hazard Warning:**

WARNING! HARMFUL IF SWALLOWED. MAY BE HARMFUL IF INHALED. AFFECTS CENTRAL NERVOUS SYSTEM. CAUSES IRRITATION TO SKIN, EYES AND RESPIRATORY TRACT.

**Label Precautions:**

Avoid contact with eyes, skin and clothing.

Avoid breathing dust.

Keep container closed.

Use only with adequate ventilation.

Wash thoroughly after handling.

**Label First Aid:**

If swallowed, give large amounts of water to drink. Never give anything by mouth to an unconscious person. Get medical attention. If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention. In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes. Get medical attention if irritation develops or persists.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS Section(s) changed since last revision of document include: 10.

**Disclaimer:**

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