Section 1. Chemical Product and Company Identification

Common Name/Trade Name
Thymol

Manufacturer
SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

Commercial Name(s)
Not available.

Synonym
5-Methyl-2-(1-methylethyl)phenol;
2-Isopropyl-5-methylphenol;
m-Thymol; m-Cresol; 6-Isopropyl-
Phenol, 5-methyl-2-(1-methylethyl)-

Chemical Name
Phenol, 5-methyl-2-(1-methylethyl)-

Chemical Formula
C10H14O

Supplier
SPECTRUM LABORATORY PRODUCTS INC.
14422 S. SAN PEDRO STREET
GARDENA, CA 90248

Catalog Number(s)
T1050

CAS#
89-83-8

RTECS
XP2275000

TSCA
TSCA 8(b) inventory: Thymol

Section 2. Composition and Information on Ingredients

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS #</th>
<th>TWA (mg/m³)</th>
<th>STEL (mg/m³)</th>
<th>CEIL (mg/m³)</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Thymol</td>
<td>89-83-8</td>
<td></td>
<td></td>
<td></td>
<td>100</td>
</tr>
</tbody>
</table>

Section 3. Hazards Identification

Potential Acute Health Effects
Very hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion. Hazardous in case of inhalation. Slightly hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive). The amount of tissue damage depends on length of contact. Eye contact can result in corneal damage or blindness. Skin contact can produce inflammation and blistering. Inhalation of dust will produce irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Severe over-exposure can produce lung damage, choking, unconsciousness or death. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering.
### Thymol

#### Potential Chronic Health Effects
- **CARCINOGENIC EFFECTS:** Not available.
- **MUTAGENIC EFFECTS:** Not available.
- **TERATOGENIC EFFECTS:** Not available.
- **DEVELOPMENTAL TOXICITY:** Not available.

The substance is toxic to mucous membranes. The substance may be toxic to kidneys, liver, central nervous system (CNS). Repeated or prolonged exposure to the substance can produce target organs damage.

### Section 4. First Aid Measures

<table>
<thead>
<tr>
<th>Effect</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye Contact</strong></td>
<td>Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Cold water may be used. WARM water MUST be used. Get medical attention immediately.</td>
</tr>
<tr>
<td><strong>Skin Contact</strong></td>
<td>In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Cover the irritated skin with an emollient. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention immediately.</td>
</tr>
<tr>
<td><strong>Serious Skin Contact</strong></td>
<td>Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td>If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention immediately.</td>
</tr>
<tr>
<td><strong>Serious Inhalation</strong></td>
<td>Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. WARNING: It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled material is toxic, infectious or corrosive. Seek immediate medical attention.</td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td>Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.</td>
</tr>
<tr>
<td><strong>Serious Ingestion</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

### Section 5. Fire and Explosion Data

<table>
<thead>
<tr>
<th>Property</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flammability of the Product</strong></td>
<td>May be combustible at high temperature.</td>
</tr>
<tr>
<td><strong>Auto-Ignition Temperature</strong></td>
<td>285°C (545°F)</td>
</tr>
<tr>
<td><strong>Flash Points</strong></td>
<td>CLOSED CUP: 102°C (215.6°F) - 104°C. OPEN CUP: 10.78°C (226°F).</td>
</tr>
<tr>
<td><strong>Flammable Limits</strong></td>
<td>Not available.</td>
</tr>
<tr>
<td><strong>Products of Combustion</strong></td>
<td>These products are carbon oxides (CO, CO2).</td>
</tr>
<tr>
<td><strong>Fire Hazards in Presence of Various Substances</strong></td>
<td>Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.</td>
</tr>
<tr>
<td><strong>Fire Fighting Media and Instructions</strong></td>
<td>SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.</td>
</tr>
<tr>
<td><strong>Special Remarks on Fire Hazards</strong></td>
<td>When heated to decomposition it emits toxic fumes.</td>
</tr>
<tr>
<td><strong>Special Remarks on Explosion Hazards</strong></td>
<td>Not available.</td>
</tr>
</tbody>
</table>

Continued on Next Page
**Section 6. Accidental Release Measures**

<table>
<thead>
<tr>
<th>Spill Type</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Spill</td>
<td>Use appropriate tools to put the spilled solid in a convenient waste disposal container.</td>
</tr>
<tr>
<td>Large Spill</td>
<td>Corrosive solid. Stop leak if without risk. Do not get water inside container. Do not touch spilled material. Use water spray to reduce vapors. Prevent entry into sewers, basements or confined areas; dike if needed. Eliminate all ignition sources. Call for assistance on disposal.</td>
</tr>
</tbody>
</table>

**Section 7. Handling and Storage**

| Precautions | Keep away from heat. Keep away from sources of ignition. Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as oxidizing agents, alkalis. |
| Storage | Keep container tightly closed. Keep container in a cool, well-ventilated area. Sensitive to light. Store in light-resistant containers. |

**Section 8. Exposure Controls/Personal Protection**

| Engineering Controls | Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit. |
| Personal Protection | Splash goggles. Synthetic apron. Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves. |
| Personal Protection in Case of a Large Spill | Splash goggles. Full suit. Vapor and dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product. |
| Exposure Limits | Not available. |

**Section 9. Physical and Chemical Properties**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state and appearance</td>
<td>Solid. (Crystals solid.)</td>
</tr>
<tr>
<td>Odor</td>
<td>Aromatic. Spicy-herbal odor reminiscent of thyme</td>
</tr>
<tr>
<td>Taste</td>
<td>Pungent. Sweet. Medicinal. Spicy</td>
</tr>
<tr>
<td>Color</td>
<td>Colorless. White.</td>
</tr>
<tr>
<td>Molecular Weight</td>
<td>150.22 g/mole</td>
</tr>
<tr>
<td>pH (1% soln/water)</td>
<td>7 [Neutral.]</td>
</tr>
<tr>
<td>Boiling Point</td>
<td>233°C (451.4°F)</td>
</tr>
<tr>
<td>Melting Point</td>
<td>48°C (118.4°F) - 52°C</td>
</tr>
<tr>
<td>Critical Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Specific Gravity</td>
<td>0.97 (Water = 1)</td>
</tr>
<tr>
<td>Vapor Pressure</td>
<td>Not applicable.</td>
</tr>
<tr>
<td>Vapor Density</td>
<td>5.2 (Air = 1)</td>
</tr>
<tr>
<td>Volatility</td>
<td>Not available.</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Not available.</td>
</tr>
<tr>
<td>Water/Oil Dist. Coeff.</td>
<td>The product is more soluble in oil; log(oil/water) = 3.3</td>
</tr>
<tr>
<td>Ionicity (in Water)</td>
<td>Not available.</td>
</tr>
<tr>
<td>Dispersion Properties</td>
<td>See solubility in water, diethyl ether.</td>
</tr>
<tr>
<td>Solubility</td>
<td>Soluble in diethyl ether. Very slightly soluble in cold water. Solubility in water: 1 g/1000 ml water @ 25°C; 900 mg/1000 ml water @ 20°C Solubility in alcohol: 1 g/1 ml alcohol @ 25°C Solubility in chloroform: 1 g/0.7 ml chloroform @ 25°C Solubility in ether: 1 g/1.5 ml ether @ 25°C Solubility in olive oil: 1 g/1.7 ml olive @ 25°C Solubility in glacial acetic acid, oils, fixed alkali hydroxide. Slightly soluble in glycerol.</td>
</tr>
</tbody>
</table>

Continued on Next Page
Section 10. Stability and Reactivity Data

<table>
<thead>
<tr>
<th>Stability</th>
<th>The product is stable.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instability Temperature</td>
<td>Not available.</td>
</tr>
<tr>
<td>Conditions of Instability</td>
<td>Excess heat, incompatible materials</td>
</tr>
<tr>
<td>Incompatibility with various substances</td>
<td>Reactive with oxidizing agents, alkalis.</td>
</tr>
<tr>
<td>Corrosivity</td>
<td>Non-corrosive in presence of glass.</td>
</tr>
</tbody>
</table>

Special Remarks on Reactivity
Incompatible with acetylaldehyde, antipyrine, camphor, monobromated camphor, chlorohydrate, menthol, quinine sulfate, salol, urethane, spirit nitrous ether.
Sensitive to light.

Special Remarks on Corrosivity
Not available.

Polymerization
Will not occur.

Section 11. Toxicological Information

Routes of Entry
Inhalation. Ingestion.

Toxicity to Animals
Acute oral toxicity (LD50): 640 mg/kg [Mouse].

Chronic Effects on Humans
Causes damage to the following organs: mucous membranes.
May cause damage to the following organs: kidneys, liver, central nervous system (CNS).

Other Toxic Effects on Humans
Very hazardous in case of skin contact (irritant), of ingestion.
Hazardous in case of inhalation (lung corrosive).
Slightly hazardous in case of skin contact (corrosive, permeator), of eye contact (corrosive).

Special Remarks on Toxicity to Animals
Lethal Dose/Conc 50% Kill:
LD50[Guinea Pig] - Route: Oral; Dose: 880 mg/kg

Special Remarks on Chronic Effects on Humans
May cause adverse reproductive effects based on animal test data. No human data found

Special Remarks on other Toxic Effects on Humans
Acute Potential Health Effects:
Skin: Causes skin irritation with possible burns. Effects may vary from mild irritation to severe destruction of tissue depending on the intensity and duration of the exposure. It may be absorbed through the skin.
Eyes: Causes severe eye irritation and possible burns. Effects may vary from mild irritation to chemical conjunctivitis and corneal damage depending on the intensity and duration of the exposure.
Inhalation: Causes respiratory tract irritation with possible chemical burns to the respiratory tract. Aspiration may lead to pulmonary edema. It may be absorbed into the blood stream and cause symptoms similar to that of ingestion.
Ingestion: May be harmful if swallowed. Causes gastrointestinal tract irritation with abdominal pain, nausea, vomiting, diarrhea and possible burns. It may affect behavior/central nervous system/peripheral nervous system (somnolence, headache, weakness, fatigue, lethargy, nervousness, agitation, dizziness, talkativeness, convulsions, spastic paralysis, sleepiness, insomnia, ataxia, coma), respiration (dyspnea, respiratory stimulation,tachypnea), cardiovascular system (hypotension, dysrhythmias). It may cause kidney and liver damage, pallor, profuse sweating.

Chronic Potential Health Effects.
Skin: It may be absorbed by the skin and cause systemic effects similar to acute ingestion.
Ingestion and inhalation: Prolonged or repeated exposure may cause symptoms similar to that of acute ingestion and inhalation. It may also affect metabolism and cause weight loss.

Section 12. Ecological Information

Ecotoxicity
Ecotoxicity in water (LC50): 3.2 mg/l 96 hours [Fish (Pimephales promelas (Fathead minnow))]. 5 mg/l 96 hours [Fish (Brachydanio rerio)]. 1.7 mg/l 96 hours [Daphnia (daphnia)]. 3.2 mg/l 96 hours [Daphnia (daphnia)].

BOD5 and COD
Not available.

Products of Biodegradation
Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

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### Thymol

**Toxicity of the Products of Biodegradation**
The products of degradation are less toxic than the product itself.

**Special Remarks on the Products of Biodegradation**
Not available.

### Section 13. Disposal Considerations

**Waste Disposal**
Waste must be disposed of in accordance with federal, state and local environmental control regulations.

### Section 14. Transport Information

**DOT Classification**
Class 8: Corrosive material

**Identification**
UNNA: 2430 : Alkylphenols, solid, n.o.s  PG: III

**Special Provisions for Transport**
Marine Pollutant

**DOT (Pictograms)**

![Corrosive Material Pictogram]

### Section 15. Other Regulatory Information and Pictograms

**Federal and State Regulations**
TSCA 8(b) inventory: Thymol

**California Proposition 65 Warnings**
California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

**Other Regulations**
EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 201-944-8).
Canada: Listed on Canadian Domestic Substance List (DSL).
China: Listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Listed on National Inventory (KECI).
Philippines: Listed on National Inventory (PICCS).
Australia: Listed on AiCS.

**Other Classifications**
WHMIS (Canada) CLASS E: Corrosive solid.
DSCL (EEC)
R22- Harmful if swallowed.
R34- Causes burns.
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

HMIS (U.S.A.)
- **Health Hazard**: 3
- **Fire Hazard**: 1
- **Reactivity**: 0
- **Personal Protection**: E

National Fire Protection Association (U.S.A.)
- **Health**: 3
- **Flammability**: 0
- **Reactivity**: Specific hazard

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Protective Equipment

Gloves.

Synthetic apron.

Vapor and dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

Splash goggles.

Section 16. Other Information

MSDS Code T3550

References Not available.

Other Special Considerations

MAJOR USES: FOR DESTROYING MOLD; PRESERVING DOCUMENTS, ART OBJECTS, AND URINE.

STABILIZER (ANTIOXIDANT) FOR TRICHLOROETHYLENE, HALOETHANE.

FLAVOR INGREDIENT

Validated by Sonia Owen on 4/13/2012.

CALL (310) 516-8000

Notice to Reader
All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user’s responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.