Health	2
Fire	1
Reactivity	0
Personal Protection	E

Material Safety Data Sheet
Thymol MSDS

Section 1: Chemical Product and Company Identification

Product Name: Thymol

Catalog Codes: SLT3814

CAS#: 89-83-8

RTECS: XP2275000

TSCA: TSCA 8(b) inventory: Thymol

CI#: Not available.

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

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

Chemical Formula: C10H14O

Contact Information:

Sciencelab.com, Inc.
14025 Smith Rd.
Houston, Texas 77396

US Sales: **1-800-901-7247**
International Sales: **1-281-441-4400**

Order Online: ScienceLab.com

CHEMTREC (24HR Emergency Telephone), call: 1-800-424-9300

International CHEMTREC, call: 1-703-527-3887

For non-emergency assistance, call: 1-281-441-4400

Section 2: Composition and Information on Ingredients

Composition:

Name	CAS #	% by Weight
Thymol	89-83-8	100

Toxicological Data on Ingredients: Thymol: ORAL (LD50): Acute: 980 mg/kg [Rat]. 640 mg/kg [Mouse]. 880 mg/kg [Guinea pig].

Section 3: Hazards Identification

Potential Acute Health Effects:
Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

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

Eye Contact:
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.

Skin Contact:
In case of contact, immediately flush skin with plenty of water. Cover the irritated skin with an emollient. Remove contaminated clothing and shoes. Wash clothing before reuse. Thoroughly clean shoes before reuse. Get medical attention.

Serious Skin Contact:
Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek immediate medical attention.

Inhalation:
If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:
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.

Serious Ingestion: Not available.

Section 5: Fire and Explosion Data

Flammability of the Product: May be combustible at high temperature.

Auto-Ignition Temperature: Not available.

Flash Points: CLOSED CUP: 102°C (215.6°F). OPEN CUP: 107.78°C (226°F).

Flammable Limits: Not available.

Products of Combustion: These products are carbon oxides (CO, CO2).

Fire Hazards in Presence of Various Substances:
Slightly flammable to flammable in presence of open flames and sparks, of heat. Non-flammable in presence of shocks.

Explosion Hazards in Presence of Various Substances:
Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions:
SMALL FIRE: Use DRY chemical powder. LARGE FIRE: Use water spray, fog or foam. Do not use water jet.

Special Remarks on Fire Hazards:
When heated to decomposition it emits toxic fumes. When heated to decomposition it emits acrid smoke and fumes.

Special Remarks on Explosion Hazards: Not available.

Section 6: Accidental Release Measures

Small Spill:
Use appropriate tools to put the spilled solid in a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and dispose of according to local and regional authority requirements.

Large Spill:
Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7: Handling and Storage

Precautions:
Keep away from heat. Keep away from sources of ignition. Empty containers pose a fire risk, evaporate the residue under a fume hood. Ground all equipment containing material. 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 dry. Keep in a cool place. Ground all equipment containing material. Keep container tightly closed. Keep in a cool, well-ventilated place. Combustible materials should be stored away from extreme heat and away from strong oxidizing agents.

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. Lab coat. 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. 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

Physical state and appearance: Solid. (Crystals solid.)

Odor:
Aromatic. Spicy-herbal odor reminiscent of thyme

Taste: Pungent. Sweet. Medicinal. Spicy

Molecular Weight: 150.22 g/mole

Color: Colorless. White.

pH (1% soln/water): 7 [Neutral.]

Boiling Point: 233°C (451.4°F)

Melting Point: 52°C (125.6°F)

Critical Temperature: Not available.

Specific Gravity: 0.97 (Water = 1)

Vapor Pressure: Not applicable.

Vapor Density: 5.2 (Air = 1)

Volatility: Not available.

Odor Threshold: Not available.

Water/Oil Dist. Coeff.: The product is more soluble in oil; log(oil/water) = 3.3

Ionicity (in Water): Not available.

Dispersion Properties: See solubility in water, diethyl ether.

Solubility:
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/1ml alcohol @ 25 C Solubility in chloroform: 1g/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 Soluble in glacial acetic acid, oils, fixed alkali hydroxide. Slightly soluble in glycerol.

Section 10: Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, incompatible materials

Incompatibility with various substances: Reactive with oxidizing agents, alkalis.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity:
Incompatible with acetanilide, 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:
Hazardous in case of skin contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans:
May cause adverse reproductive effects based on animal test data. No human data found May affect genetic material (mutagenic)

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. Eyes: Causes 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: 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 symtoms similar to that of acute ingestion and inhalation. It may also affect metabolism and cause weight loss.

Section 12: Ecological Information

Ecotoxicity: Not available.

BOD5 and COD: Not available.

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

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: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

Section 15: Other Regulatory Information

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

Other Regulations:
OSHA: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200). EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances.

Other Classifications:

WHMIS (Canada): Not controlled under WHMIS (Canada).

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. S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S28- After contact with skin, wash immediately with plenty of water. S36/37/39- Wear suitable protective clothing, gloves and eye/face protection. S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). S61- Avoid release to the environment. Refer to special instructions/Safety data sheets.

HMIS (U.S.A.):

Health Hazard: 2

Fire Hazard: 1

Reactivity: 0

Personal Protection: E

National Fire Protection Association (U.S.A.):

Health: 2

Flammability: 1

Reactivity: 0

Specific hazard:

Protective Equipment:
Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Splash goggles.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/11/2005 12:46 PM

Last Updated: 11/06/2008 12:00 PM

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