

SAFETY DATA SHEET

Preparation Date: 04/17/2015

Revision Date: 08/06/2015

Revision Number: G2

1. IDENTIFICATION

Product identifier

Product code: T1050
Product Name: THYMOL, CRYSTAL, NF

Other means of identification

Synonyms:

1-Hydroxy-5-methyl-2-isopropylbenzene
1-Methyl-3-hydroxy-4-isopropylbenzene
2-Hydroxy-1-isopropyl-4-methylbenzene
2-Isopropyl-5-methylphenol
3-Hydroxy-1-methyl-4-isopropylbenzene
3-Hydroxy-p-cymene
3-Methyl-6-isopropylphenol
3-p-Cymenol
5-Methyl-2-(1-methylethyl)phenol
5-Methyl-2-isopropyl-1-phenol
5-Methyl-2-isopropylphenol
6-Isopropyl-3-methylphenol
6-Isopropyl-m-cresol
Cymophenol, alpha-
Isopropyl cresol
Phenol, 2-isopropyl-5-methyl-
Phenol, 5-methyl-2-(1-methylethyl)-
Thyme camphor
Thymic acid
Thymol (natural)
m-Cresol, 6-isopropyl-
m-Thymol
p-Cymen-3-ol
p-Cymene, 3-hydroxy-
CAS #: 89-83-8
RTECS #: XP2275000
CI#: Not available

CAS #:

RTECS #

CI#:

Recommended use of the chemical and restrictions on use

Recommended use: Laboratory reagent. Preservative. Antioxidant. For destroying mold; mold and mildew preventative; preserving documents, art objects, and urine; stabilizer (antioxidant) for Trichloroethylene, Haloethane. Flavoring ingredient.

Uses advised against: No information available

Supplier: Spectrum Chemical Mfg. Corp
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Order Online At: <https://www.spectrumchemical.com>

Emergency telephone number

Contact Person:

Contact Person:

Chemtrec 1-800-424-9300

Martin LaBenz (West Coast)

Ibad Tirmiz (East Coast)

2. HAZARDS IDENTIFICATION

Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 4
Skin corrosion/irritation	Category 1 Sub-category B
Serious eye damage/eye irritation	Category 1

Label elements

Danger

Hazard statements

Harmful if swallowed

Causes severe skin burns and eye damage



Hazards not otherwise classified (HNOC)

Not Applicable

Other hazards

Toxic to aquatic life with long lasting effects

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling

Do not eat, drink or smoke when using this product

Do not breathe dust/fume/gas/mist/vapors/spray

Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

Immediately call a POISON CENTER or doctor/physician

Specific treatment (see .? on this label)

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower

Wash contaminated clothing before reuse

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician.

IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Rinse mouth

Do NOT induce vomiting

Product code: T1050

Product name: THYMOL, CRYSTAL,
NF

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Precautionary Statements - Storage

Store locked up

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No.	Weight %	Trade Secret
Thymol 89-83-8	89-83-8	100	*

4. FIRST AID MEASURES**First aid measures****General Advice:**

Poison information centers in each State capital city can provide additional assistance for scheduled poisons (13 1126). Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Skin Contact:

Wash off immediately with soap and plenty of water removing all contaminated clothes and shoes. Continue flushing with plenty of water for at least 15 minutes. Remove all contaminated clothes and shoes. Immediate medical attention is required. Call a physician or Poison Control Centre immediately.

Eye Contact:

Flush eye with water for 15 minutes. Immediate medical attention is required. Call a physician immediately.

Inhalation:

Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. **WARNING!** It may be hazardous to the person providing aid to give mouth-to-mouth resuscitation when the inhaled or ingested material is toxic, infectious or corrosive. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Immediate medical attention is required.

Ingestion:

Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Immediate medical attention is required. Call a physician or Poison Control Center immediately.

Most important symptoms and effects, both acute and delayed**Symptoms**

Contact causes severe skin irritation and possible burns. Causes serious eye irritation. Ingestion causes irritation of upper respiratory system and gastrointestinal disturbance.

Indication of any immediate medical attention and special treatment needed**Notes to Physician:**

Treat symptomatically

Protection of first-aiders

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste

5. FIRE-FIGHTING MEASURES**Extinguishing Media****Suitable Extinguishing Media:**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Unsuitable Extinguishing Media:

No information available.

Specific hazards arising from the chemical

Hazardous Combustion Products:

Carbon oxides

Specific hazards:

May be combustible at high temperatures
When heated to decomposition it emits toxic fumes

Special Protective Actions for Firefighters

Specific Methods:

No information available.

Special Protective Equipment for Firefighters:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions:

Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment. Avoid breathing dust. Remove all sources of ignition.

Environmental precautions

Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Prevent entry into waterways, sewers, basements or confined areas.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so. Cover with plastic sheet to prevent spreading.

Methods for cleaning up

Use appropriate tools to put the spilled solid in a suitable waste disposal container. Clean contaminated surface thoroughly.

7. HANDLING AND STORAGE

Precautions for safe handling

Technical Measures/Precautions:

Ensure adequate ventilation. Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Remove all sources of ignition.

Safe Handling Advice

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid dust formation. Do not breathe vapours/dust. Do not ingest. Keep away from heat and sources of ignition. Protect from light. When using do not smoke. Handle in accordance with good industrial hygiene and safety practice.

Conditions for safe storage, including any incompatibilities

Technical Measures/Storage Conditions:

Sensitive to light. Store in light-resistant containers. Keep container tightly closed in a dry and well-ventilated place. Store away from incompatible materials. Store in a segregated and approved area.

Incompatible Materials:

Oxidizing agents. Alkalis. Acetanilide. Antipyrine. camphor. Monobromated. Chlorohydrate. Chloral hydrate. menthol. Quinine sulfate. Salol. Urethane. Spirit nitrous ether.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

National occupational exposure limits

United States

Components	OSHA	NIOSH	ACGIH	AIHA WHEEL
Thymol 89-83-8	None	None	None	None

Canada

Components	Alberta	British Columbia	Ontario	Quebec
Thymol 89-83-8	None	None	None	None

Australia and Mexico

Components	Australia	Mexico
Thymol 89-83-8	None	None

Appropriate engineering controls

Engineering measures to reduce exposure:

Ensure adequate ventilation. 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.

Individual protection measures, such as personal protective equipment

Personal Protective Equipment

- Eye protection:** Goggles or Safety glasses with side-shields
- Skin and body protection:** Long sleeved clothing. Chemical resistant apron. Gloves.
- Respiratory protection:** Respirator with combination filter for vapor/particulate..
- Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Physical state: Solid.	Appearance: Crystals.	Color: Colorless.
Odor: Aromatic. Spicy-herbal. Thyme-like.	Taste Pungent. Sweet. Spicy.	Molecular/Formula weight: 150.22 g/mol
Formula: C10-H14-O	Flammability: No information available	Flash point (°C): 102-104°C
Flashpoint (°C/°F): 102-104°C/ 215.6-219.2°F	Flash Point Tested according to: Closed cup	Lower Explosion Limit (%): No information available
Autoignition Temperature (°C/°F): 285°C/ 545°F	Upper Explosion Limit (%): No information available	pH: 7
Melting point/range(°C/°F): 48-52°C/ 118.4-125.6°F	Boiling point/range(°C/°F): 233°C/451.4°F	Decomposition temperature(°C/°F): No information available
Bulk density: No information available	Specific gravity: 0.9699	Vapor pressure @ 20°C (kPa): No information available
Density (g/cm3): No information available	Evaporation rate: No information available	Vapor density: 5.2
VOC content (g/L): No information available	Odor threshold (ppm): No information available	Partition coefficient (n-octanol/water): 3.30
Viscosity: No information available	Miscibility: No information available	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 Soluble in Oils

10. STABILITY AND REACTIVITY

Reactivity

Reactive with oxidizing agents

Reactive with alkalis

Incompatible with Acetanilide, Antipyrine, camphor, Monobromated, Chlorohydrate, Chloral hydrate, menthol, Quinine sulfate, Salol, Urethane, Spirit nitrous ether

Chemical stability

Stability:

Sensitive to light. Exposure to light accelerates decomposition.

Possibility of Hazardous Reactions:

Hazardous polymerization does not occur

Conditions to avoid:

Avoid excessive heat and light. Ignition sources. Incompatible materials.

Incompatible Materials: Oxidizing agents. Alkalis. Acetanilide. Antipyrine. camphor. Monobromated. Chlorohydrate. Chloral hydrate. menthol. Quinine sulfate. Salol. Urethane. Spirit nitrous ether.

Hazardous decomposition products: Carbon oxides.

Other Information

Corrosivity: No information available

Special Remarks on Corrosivity: No information available

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Principal Routes of Exposure:

Ingestion. Inhalation.

Acute Toxicity

Component Information

Thymol - 89-83-8

LD50/oral/rat = 980 mg/kg Oral LD50 Rat

LD50/oral/mouse = 640 mg/kg

LD50/dermal/rat = >2000 mg/kg

LD50/dermal/rabbit = No information available

LC50/inhalation/rat = No information available

LC50/inhalation/mouse = No information available

Other LD50 or LC50 information = No information available

Product Information

LD50/oral/rat =

VALUE- Acute Tox Oral = 980mg/kg

LD50/oral/mouse =

Value - Acute Tox Oral = 640mg/kg

LD50/dermal/rabbit

VALUE-Acute Tox Dermal = No information available

LD50/dermal/rat

VALUE -Acute Tox Dermal = > 2000mg/kg

LC50/inhalation/rat

VALUE-Vapor = No information available

VALUE-Gas = No information available

VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse

VALUE-Vapor = No information available

VALUE - Gas = No information available

VALUE - Dust/Mist = No information available

Symptoms

Skin Contact:	Causes skin irritation. Causes skin 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.
Eye Contact:	Causes severe eye irritation and possible burns. Effects can vary from mild irritation to chemical conjunctivitis and corneal damage depending on the intensity and duration of exposure.
Inhalation	Causes respiratory tract irritation with possible chemical burns. Aspiration may lead to pulmonary edema.
Ingestion	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.
Aspiration hazard	No information available

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity	Skin: It may be absorbed by the skin and cause systemic effects similar to acute ingestion. Prolonged or repeated ingestion may have symptoms similar to that of acute ingestion.
Sensitization:	No information available
Mutagenic Effects:	May affect genetic material Experiments with human lymphocytes have shown mutagenic effects Cytogenic analysis (hamster lung) Sister Chromatid Exchange (hamster embryo)
Carcinogenic effects:	Not considered carcinogenic

Components	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Prohibited Carcinogenic Substances	Australia - Notifiable Carcinogenic Substances
Thymol	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

Reproductive toxicity No data is available

Reproductive Effects:	May cause adverse reproductive effects based on animal data
Developmental Effects:	No information available
Teratogenic Effects:	No information available

Specific Target Organ Toxicity

STOT - single exposure	No information available
STOT - repeated exposure	No information available
Target Organs:	Mucous membrane. Kidneys. Liver. Central nervous system.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Ecotoxicity effects: Harmful to aquatic organisms.

Thymol - 89-83-8

Freshwater Fish Species Data: 3.2 mg/L LC50 Pimephales promelas 96 h static 1
5 mg/L LC50 Brachydanio rerio 96 h static 1

Water Flea Data: 1.7-3.2 mg/L EC50 Daphnia (daphnia) 96 h

Persistence and degradability: No information available

Bioaccumulative potential: No information available

Mobility: No information available

13. DISPOSAL CONSIDERATIONS

Disposal Methods

Waste from residues / unused products:

Waste must be disposed of in accordance with Federal, State and Local regulation.

Contaminated packaging:

Empty containers should be taken for local recycling, recovery or waste disposal

Components	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Thymol	None	None	None	None

14. TRANSPORT INFORMATION

DOT

UN-No: UN2430
Proper Shipping Name: Alkylphenols, solid, n.o.s.
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
ERG No: 153
Marine Pollutant: No data available
DOT RQ (lbs): No information available

Symbol(s):

TDG (Canada)

UN-No: UN2430
Proper Shipping Name: Alkylphenols, solid, n.o.s.
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

14. TRANSPORT INFORMATION

ADR

UN-No: UN2430
Proper Shipping Name: Alkylphenols, solid, n.o.s.
Hazard Class: 8
Packing Group: III
Subsidiary Risk: No information available
Classification Code: No information available
Description: No information available
CEFIC Tremcard No: No information available

IMO / IMDG

UN-No: UN2430
Proper Shipping Name: Alkylphenols, solid, n.o.s.
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
Description: No information available
IMDG Page: No information available
Marine Pollutant: No information available
EMS: F-A
MFA G: No information available
Maximum Quantity: No information available

RID

UN-No: UN2430
Proper Shipping Name: Alkylphenols, solid, n.o.s.
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
Classification Code: No information available
Description: No information available

ICAO

UN-No: UN2430
Proper Shipping Name: Alkylphenols, solid, n.o.s.
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
Description: No information available

IATA

UN-No: UN2430
Proper Shipping Name: Alkylphenols, solid, n.o.s.
Hazard Class: 8
Subsidiary Risk: No information available
Packing Group: III
ERG Code: 8L
Description: No information available

15. REGULATORY INFORMATION

International Inventories

Components	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	CHINA	Australia (AICS)	EINECS-No.
Thymol	Present	Present KE-24420	Present	Present (4)-57 (3)-521	Present	Present	Present 201-944-8

U.S. Regulations

Thymol

FDA - Direct Food Additives 21 CFR 172.515

FDA - 21 CFR - Total Food Additives 172.515 175.105

California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.

Chemicals Known to the State of California to Cause Cancer:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Chemicals Known to the State of California to Cause Reproductive Toxicity:

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Components	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Thymol	Not Listed	Not Listed	Not Listed	Not Listed

CERCLA/SARA

Components	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting <i>de minimis</i>
Thymol	None	None	None	None	None

U.S. TSCA

Components	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Thymol	Not Applicable	Not Applicable

Canada

WHMIS hazard class:

E Corrosive material

Canada Controlled Products Regulation:

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

Inventory

Components	Canada (DSL)	Canada (NDSL)
Thymol	Present	Not Listed

Components	CEPA Schedule I - Toxic Substances	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Thymol	Not listed	Not listed

EU Classification

R-phrases(s)

R34 - Causes burns.

R22 - Harmful if swallowed.

R51 - Toxic to aquatic organisms.

R53 - May cause long-term adverse effects in the aquatic environment.

S -phrase(s)

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

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.

S 1/2 - Keep locked up and out of the reach of children.

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection.

Components	Classification	Concentration Limits:	Safety Phrases
Thymol	Xn; R22 C; R34 N; R51-53	No information	S1/2 S26 S28 S36/37/39 S45 S61

The product is classified in accordance with Annex VI to Directive 67/548/EEC

Indication of danger:

C - Corrosive.

Xn - Harmful.

N - Dangerous for the environment.

**16. OTHER INFORMATION**

16. OTHER INFORMATION

Preparation Date: 04/17/2015
Revision Date: 08/06/2015
Prepared by: Sonia Owen

Disclaimer:

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) 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 SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. 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 SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

End of Safety Data Sheet