

# Thymol

## Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830  
Date of issue: 01/03/2012 Revision date: 06/01/2017

**263435**

Version: 2.0

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

Product form : Substance  
Substance name : Thymol  
IUPAC name : 5-Methyl-2-(methylethyl)phenol  
EC index no : 604-032-00-1  
EC no : 201-944-8  
CAS No : 89-83-8  
Product code : 263435  
Formula : C<sub>10</sub>H<sub>14</sub>O  
Product group : Raw material

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

#### 1.2.1. Relevant identified uses

Main use category : Pharmaceutical  
Function or use category : Raw material

#### 1.2.2. Uses advised against

No additional information available

### 1.3. Details of the supplier of the safety data sheet

#### Supplier

Duchefa Farma BV  
A. Hofmanweg 71  
2031BH Haarlem - Nederland  
T +31(0)23-5319093  
[farma@ducheffa.nl](mailto:farma@ducheffa.nl) - [www.duchefa-farma.com](http://www.duchefa-farma.com)

### 1.4. Emergency telephone number

Emergency number : Supplier contact information:  
+31(0)23-5319093 (M-F 09:00-17:00)  
+31(0)6-30109355 (outside office hours)

Country	Organisation/Company	Address	Emergency number	Comment
United Kingdom	Guy's & St Thomas' Poisons Unit Medical Toxicology Unit, Centre Hospitalier Universitaire de Constantine	Avonley Road SE14 5ER London	0870 243 2241	

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP]

Acute toxicity (oral), Category 4 H302  
Skin corrosion/irritation, Category 1B H314

Hazardous to the aquatic environment — Chronic Hazard, Category 2 H411

Full text of hazard classes and H-statements : see section 16

### Adverse physicochemical, human health and environmental effects

No additional information available

## 2.2. Label elements

### Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



Signal word (CLP) : Danger

Hazard statements (CLP) : H302 - Harmful if swallowed  
H314 - Causes severe skin burns and eye damage  
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements (CLP) : P273 - Avoid release to the environment  
P280 - Wear eye protection, face protection, protective clothing, protective gloves  
P302+P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 - IF IN EYES:  
P351 - Rinse cautiously with water for several minutes  
P310 - Immediately call a POISON CENTER or doctor/physician

## 2.3. Other hazards

No additional information available

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Thymol	(CAS No) 89-83-8 (EC no) 201-944-8 (EC index no) 604-032-00-1	100	Acute Tox. 4 (Oral), H302 Skin Corr. 1B, H314 Aquatic Chronic 2, H411

Full text of H-statements: see section 16

### 3.2. Mixture

Not applicable

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

First-aid measures after inhalation : Assure fresh air breathing. Get medical advice and attention if you feel unwell.

- First-aid measures after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Seek medical attention if ill effect or irritation develops.
- First-aid measures after eye contact : Rinse immediately with plenty of water. If eye irritation persists, take medical advice.
- First-aid measures after ingestion : Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce vomiting. Seek medical attention immediately.

#### 4.2. Most important symptoms and effects, both acute and delayed

- Symptoms/injuries : Causes burns. Exposure may produce an allergic reaction. Nervous system disorder.

#### 4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide. Dry powder. Foam. Water spray.
- Unsuitable extinguishing media : Do not use a heavy water stream.

#### 5.2. Special hazards arising from the substance or mixture

- Fire hazard : This product is flammable. On exposure to high temperature, may decompose, releasing toxic gases. Carbon dioxide. Carbon monoxide.
- Explosion hazard : Product is not explosive.

#### 5.3. Advice for firefighters

- Firefighting instructions : Prevent fire fighting water from entering the environment.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

- Emergency procedures : Ensure adequate air ventilation. Avoid raising dust.

##### 6.1.2. For emergency responders

- Protective equipment : Wear respiratory protection. Wear proper protective equipment.

#### 6.2. Environmental precautions

Prevent product from entering drains.

#### 6.3. Methods and material for containment and cleaning up

- Methods for cleaning up : Sweep up dry powder and dispose properly. To clean the floor or objects contaminated by this product, use : Detergent.

#### 6.4. Reference to other sections

No additional information available

### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

- Precautions for safe handling : Handle in accordance with good industrial hygiene and safety procedures.

**7.2. Conditions for safe storage, including any incompatibilities**

Storage conditions : Store in dry, well-ventilated area. Keep container tightly closed. Protect from sunlight.

Maximum storage period : 3 year

**7.3. Specific end use(s)**

No additional information available

**SECTION 8: Exposure controls/personal protection****8.1. Control parameters**

No additional information available

**8.2. Exposure controls****Hand protection:**

Type	Material	Permeation	Thickness (mm)	Standard
Gloves	Nitrile rubber (NBR)	6 (> 480 minutes)	0,11	EN 374

**Eye protection:**

Safety glasses

**Skin and body protection:**

Protective clothing (with elasticated cuffs and closed neck). The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

**Respiratory protection:**

Dust production: dust mask with filter type P2

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state : Solid

Appearance : Crystalline solid.

Molecular mass : 150.2 g/mol

Colour : Colourless.

Odour : Characteristic.

Odour threshold : No data available

pH : 7

pH solution : 1 g/l in H<sub>2</sub>O

Relative evaporation rate (butylacetate=1) : No data available

Melting point : 48 - 52 °C

Freezing point : No data available

Boiling point : 233 °C

Flash point : 102 °C

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Flammability (solid, gas) : No data available

Vapour pressure : No data available

Relative vapour density at 20 °C : No data available

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Relative density	: No data available
Density	: 0.9699 g/cm <sup>3</sup> 20°C
Solubility	: Soluble in ethanol. Water: 1.4 g/l 40°C
Log Pow	: 3.3
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: 1.4 - 7.7 vol %

**9.2. Other information**

No additional information available

**SECTION 10: Stability and reactivity****10.1. Reactivity**

No additional information available

**10.2. Chemical stability**

Stable under normal conditions.

**10.3. Possibility of hazardous reactions**

None known.

**10.4. Conditions to avoid**

No additional information available

**10.5. Incompatible materials**

Strong oxidizers. Strong acids. Bases.

**10.6. Hazardous decomposition products**

Carbon dioxide. Carbon monoxide.

**SECTION 11: Toxicological information****11.1. Information on toxicological effects**

Acute toxicity : Oral: Harmful if swallowed.

Thymol (89-83-8)	
LD50 oral rat	980 mg/kg
LD50 dermal rabbit	> 2000 mg/kg

Skin corrosion/irritation : Causes severe skin burns and eye damage.  
pH: 7Serious eye damage/irritation : Serious eye damage, category 1, implicit  
pH: 7

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

Specific target organ toxicity (single exposure) : Not classified

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Specific target organ toxicity (repeated exposure) : Not classified

Aspiration hazard : Not classified

## SECTION 12: Ecological information

### 12.1. Toxicity

Thymol (89-83-8)	
LC50 fish 1	ca. 5 mg/l 96 h, Brachydanio rerio
EC50 Daphnia 1	3.2 mg/l 48 h

### 12.2. Persistence and degradability

Thymol (89-83-8)	
Persistence and degradability	Biodegradable.
Biodegradation	> 80 %

### 12.3. Bioaccumulative potential

Thymol (89-83-8)	
Log Pow	3.3

### 12.4. Mobility in soil

No additional information available

### 12.5. Results of PBT and vPvB assessment

No additional information available

### 12.6. Other adverse effects

No additional information available

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

Waste treatment methods : Avoid release to the environment.

Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.

## SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IATA
<b>14.1. UN number</b>	
1759	1759
<b>14.2. UN proper shipping name</b>	
CORROSIVE SOLID, N.O.S.	Not applicable
<b>14.3. Transport hazard class(es)</b>	
8	8
 The image shows two hazard pictograms side-by-side. The left one is for Corrosive (C) and the right one is for Environment (E). Both are in diamond shapes with a black border. The Corrosive pictogram shows a liquid dripping from two test tubes onto a hand and a metal surface. The Environment pictogram shows a dead tree and a dead fish.	 The image shows a single hazard pictogram for Environment (E) in a diamond shape with a black border. It depicts a dead tree and a dead fish.
<b>14.4. Packing group</b>	
III	Not applicable
<b>14.5. Environmental hazards</b>	
Dangerous for the environment : Yes	Dangerous for the environment : Yes
No supplementary information available	

### 14.6. Special precautions for user

#### - Overland transport

Classification code (ADR) : C10

Excepted quantities (ADR) : E1

Hazard identification number (Kemler No.) : 80

Orange plates : 

80
1759

Tunnel restriction code (ADR) : E

EAC code : 2X

#### - Air transport

No data available

### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### 15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Thymol is not on the REACH Candidate List

Thymol is not on the REACH Annex XIV List

#### 15.1.2. National regulations

No additional information available

### 15.2. Chemical safety assessment

No chemical safety assessment has been carried out

## SECTION 16: Other information

Indication of changes:

1.4	Emergency telephone	Modified	Added additional information
2	R-phrases	Removed	Obsolete
8.2	Hand protection	Modified	Specified material, thickness, et cetera of gloves
8.2	Skin and body protection	Modified	Added additional information (type of clothing related to concentration levels)

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Skin Corr. 1B	Skin corrosion/irritation, Category 1B
H302	Harmful if swallowed
H314	Causes severe skin burns and eye damage

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H411	Toxic to aquatic life with long lasting effects
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*This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product*