



## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### Product information

Trade name : **Lentacol**

Usage : Pesticide

Company : Nufarm GmbH & Co KG  
St.-Peter-Str. 25  
A-4021 Linz  
AUSTRIA

Emergency telephone number : +43/732/6914-2466

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

**Chemical nature** : Mixture of active ingredient and additives

| Components | CAS-No.  | EINECS-No.<br>ELINCS-No. | Symbol(s): | R-phrases)                                   | Concentration |
|------------|----------|--------------------------|------------|--|---------------|
| thiram     | 137-26-8 | 205-286-2                | Xn, N      | R20/22,<br>R36/38, R43,<br>R48/22,<br>R50/53 | 10.0 %        |

## 3. HAZARDS IDENTIFICATION

Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 4. FIRST AID MEASURES

Eye contact : Rinse immediately with plenty of water for at least 15 minutes.

Skin contact : Wash off with soap and plenty of water.

Inhalation : Move to fresh air.

Ingestion : Rinse mouth. If ingested, gastric lavage. Do not give milk or alcoholic beverages. Do not induce vomiting. Obtain medical attention.

### Notes to physician

Symptoms : From experiments with animals: Breathing difficulties, weakness, headache, vomiting, Irregular cardiac activity

Treatment : No specific antidote, symptomatic treatment.



## 5. FIRE-FIGHTING MEASURES

- Specific hazards during fire fighting : In the event of fire (NO<sub>x</sub>,CO<sub>x</sub>,SO<sub>2</sub>) may be formed.
- Special protective equipment for fire-fighters : Use personal protective equipment. Wear self contained breathing apparatus for fire fighting if necessary.
- Suitable extinguishing media : water spray, dry powder, sand, foam, carbon dioxide (CO<sub>2</sub>)
- Extinguishing media which must not be used for safety reasons : high volume water jet
- Further information : Standard procedure for chemical fires. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

## 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions : Use personal protective equipment.
- Environmental precautions : Do not flush into surface water or sanitary sewer system.
- Methods for cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Use mechanical handling equipment.
- Additional advice : Never return spills in original containers for re-use.

## 7. HANDLING AND STORAGE

### Handling

- Safe handling advice : Keep out of reach of children. Wear personal protective equipment.

### Storage

- Requirements for storage areas and containers : Store at room temperature in the original container.
- Advice on common storage : Keep away from food, drink and animal feeding stuffs.

### Storage stability

- Storage temperature : < 40 °C  
: > 0 °C



## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### Personal protective equipment

- Respiratory protection : Suitable respiratory equipment.
- Hand protection : protective gloves
- Eye protection : safety glasses
- Skin and body protection : long sleeved clothing
- Hygiene measures : Remove and wash contaminated clothing and gloves, including the inside, before re-use. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product.
- Protective measures : Keep working clothes separately. Avoid contact with skin, eyes and clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Appearance

- Physical state : liquid at 20 °C ,
- Form : suspension
- Colour : beige
- Odour : musty

### Other data

- Melting point/range : no data available
- Boiling point/range : ca.100 °C  
at 1,013 hPa  
Aqueous suspension
- Flash point : does not flash
- Ignition temperature : no data available
- Upper explosion limit : no data available



Lower explosion limit : no data available

Vapour pressure : 2.3E-3 Pa  
at 25 °C  
(Thiram)

Density : 1.3 g/cm<sup>3</sup>  
at 20 °C

Water solubility : dispersible

pH : 6 - 8  
at ( 20 °C)  
(undiluted)

Partition coefficient (n-octanol/water) : no data available

Viscosity, dynamic : > 5,000 mPa.s  
  
< 10,000 mPa.s

## 10. STABILITY AND REACTIVITY

Thermal decomposition : No decomposition if stored and applied as directed.

Conditions to avoid : none

Materials to avoid : none

## 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : LD50 rat  
Dose: > 2,000 mg/kg

Acute dermal toxicity : LD50 rat  
Dose: > 2,000 mg/kg

Acute inhalation toxicity : LC50 rat



Exposure time: 4 h  
Dose: > 0.4 mg/l

Skin irritation : rabbit  
Result: Mild skin irritation

Eye irritation : rabbit  
Result: No eye irritation

Sensitization : Guinea-pig  
Result: Did not cause sensitization.

Evaluation mutagenicity : Muta.Cat.3

## 12. ECOLOGICAL INFORMATION

### Elimination information (persistence and degradability)

Biodegradability : Readily biodegradable, according to appropriate OECD test.

Stability in soil : DT50 : 0.5 h  
(Thiram)

### Ecotoxicity effects

Toxicity to bees : Not toxic to bees.

Toxicity to birds : Practically non toxic.

Toxicity to fish : LC50  
Dose: 0.16 mg/l  
Testing period: 96 h  
Test substance: (Thiram)  
Very toxic to aquatic organisms.

LC50 *Oncorhynchus mykiss* (Rainbow trout)  
Dose: 0.27 mg/l  
Testing period: 96 h  
Test substance: (Lentacol universal)  
Toxic to fish.

Toxicity to daphnia : Daphnia  
Dose: 0.21 mg/l  
Testing period: 48 h  
Test substance: (Thiram)



Very toxic to aquatic organisms.

EC50 Daphnia magna (Water flea)  
Dose: 0.64 mg/l  
Testing period: 48 h

Toxicity to algae : ErC50 Scenedesmus subspicatus  
Dose: 0.35 mg/l  
Exposure time: 72 h

EbC50 Scenedesmus subspicatus  
Dose: 0.12 mg/l  
Exposure time: 72 h

**Further information** : According to our experience, doesn't cause any disturbance in waste water clarifying plant if used appropriately., Toxic to aquatic organisms.

### 13. DISPOSAL CONSIDERATIONS

Product : In accordance with local and national regulations.

Contaminated packaging : Do not re-use empty containers. Dispose of as unused product.

According to European Directive 2000/532/EC as amended :

Waste Key Number : 02 01 08 (agrochemical waste containing dangerous substances)

### 14. TRANSPORT INFORMATION

UN-No : 3082

Description of the goods : UN3082 ENVIRONMENTALLY HAZARDOUS SUBSTANCE,  
LIQUID, N.O.S.\*

**ADR/RID**

Class : 9

Packaging group : III



**SAFETY DATA SHEET**  
 according to EC directive 2001/58/EC

**Lentacol**  
 Version 10

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**IMDG**

Class : 9  
 Packaging group : III  
 Marine pollutant : MP

**IATA-DGR**

Class : 9  
 Packaging group : III

**15. REGULATORY INFORMATION**

Symbol(s): : N Dangerous for the environment  
 Xn Harmful

R-phrase(s) : R48/22 Harmful: danger of serious damage to health by  
 R50/53 prolonged exposure if swallowed.  
 Very toxic to aquatic organisms, may cause  
 long-term adverse effects in the aquatic  
 environment.

S-phrase(s) : S 2 Keep out of reach of children.  
 S13 Keep away from food, drink and animal feeding  
 stuffs.  
 S20/21 When using, do not eat, drink or smoke.  
 S24/25 Avoid contact with skin and eyes.  
 S36/37 Wear suitable protective clothing and gloves.  
 S56 Dispose of this material and its container to  
 hazardous or special waste collection point.  
 S60 This material and/or its container must be  
 disposed of as hazardous waste.

Further information : Handle in accordance with good industrial hygiene and safety  
 practice.

Other regulations : The product is classified and labelled in accordance with National  
 and European directives.

**16. OTHER INFORMATION**

Revision date: : 23.05.2005



**SAFETY DATA SHEET**  
according to EC directive 2001/58/EC

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(Alterations are indicated in the left hand margin by: || )

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**Contact person**

|           |   |  |  |
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