



## MERCHEM LIMITED

### SAFETY DATA SHEET

MERCURE TBzTD  
MSDS No. 14/20.03.2015

## SECTION 1: IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

### 1.1 Product Identifier

Product Name Mercure TBzTD  
Synonym Tetra Benzyl Thiuram Disulphide

### 1.2 Use of the Substance/Mixture

Identified uses Rubber vulcanization accelerator

### 1.3 Manufacturer or supplier's details

Company/Undertaking identification address Merchem Limited  
Grove Centre,  
44- Development Plot,  
Kalamassery,  
Cochin – 683 109, Kerala, India  
Telephone + 91-484-4089300  
Telefax + 91-484-4089310

### 1.4 Emergency Telephone Number

Emergency Telephone Number + 91-484-4089300

## SECTION 2: HAZARDS IDENTIFICATION

### 2.1 Classification of the substance or mixture

Classification according to EU directives 67/548/EEC or 1999/45/EC

R53  
EC Number : 404-310-0  
Annex 1 Index Number : 016-073-00-7

### REGULATION (EC) No. 1272/2008

Classification of the substance or mixture Aquatic chronic 4.

### 2.2 Label elements

Product Name Mercure TBzTD  
Hazard pictograms Nil  
Signal Word Nil



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#### Hazard Statements

H413 :May cause long lasting harmful effects to aquatic life.

#### Precautionary Statements - prevention

P273 :Avoid release to the environment.

#### Precautionary Statements - Response

Nil

#### Precautionary Statements - Storage

P403 + P233: Store in a well-ventilated place. Keep container tightly closed

#### Precautionary Statements - Disposal

P501 Dispose of contents/ container to an approved waste disposal plant

Supplemental Hazard statements - None

#### 2.3 Other hazards

None

### SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Substance is not a mixture

#### 3.2 Mixtures

Chemical description:

Tetra Benzyl thiuram di sulphide

Composition/Information on ingredients

Chemical Name	CAS No.	EC No.	Annex-1 Index No.	Weight %
Tetra Benzyl thiuram di sulphide	10591-85-2	404-310-0	016-073-00-7	98%
White mineral oil	8042-47-5	232-455-8	-	1-2

### SECTION 4: FIRST AID MEASURES

#### 4.1 Description of first-aid measures

General Advice

If symptoms persist, call a physician. Show this material safety data sheet to the doctor in attendance. Treat symptomatically. Use of alcoholic beverages may enhance toxic effects. In case of allergic reaction after exposure, any future exposure must be avoided.



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- Inhalation** : Move to fresh air, if symptoms persist, seek medical advice
- Skin Contact** : Wash immediately with soap and water, Remove contaminated clothing
- Eye Contact** : Rinse immediately as long as a possible with plenty of water. Seek medical advice if irritation persist
- Ingestion** : Rinse mouth ,give water to drink ,seek medical attention

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

Toxic if swallowed. Causes skin irritation, causes eye irritation. May cause respiratory irritation. May cause long lasting harmful effect to aquatic life.

#### **4.3 Indication of immediate medical attention and special treatment needed**

No data available

### SECTION 5: FIRE FIGHTING MEASURES

#### **5.1 Extinguishing media**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### **5.2 Specific hazards arising from the substance or mixture**

Carbon oxides(Cox), nitrogen oxides (NOx), Sulphur dioxide

Special hazards : Risk of dust explosion

#### **5.3 Protective Equipment and Precautions for Firefighters**

Wear self contained breathing apparatus for fire fighting if necessary

**5.4 Additional Information** : Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

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

Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas.

Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

#### **6.2 Environmental precautions**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge to the environment must be avoided

#### **6.3 Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and collect it in a suitable container for disposal. Keep it closed

#### **6.4 Reference to other sections**

See section 7, 8 and 13



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## SECTION 7: HANDLING AND STORAGE

### 7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Dust can combine with air to form explosive mixture.

Provide appropriate exhaust ventilation at places where dust is formed.

Protect against electrostatic charges. Keep ignition sources away. Do not smoke

For precautions see section 2.2.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

### 7.3 Specific end uses

No further relevant information available.

## SECTION 8: EXPOSURE CONTROL/PERSONNEL PROTECTION

### 8.1 Control parameters

**Occupational exposure limit values**

No data available

### 8.2 Exposure controls

#### **Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of work. Do not inhale dust/mist/fog.

#### **Personal Protective Equipment:**

**Eye/face Protection** :Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin Protection** :Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose off contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands

**Hand Protection** :Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace

**Respiratory Protection:** For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Environmental exposure controls:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.



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## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

a) Appearance Form	: Solid powder
b) colour	: Light yellow/cream
c) Odour	: Odourless
d) Odour Threshold	: No data available
e) pH	: Not applicable
f) Melting range	: 126-132°C
g) Boiling point and boiling range	: Not Applicable
h) Flash point	: >140°C
i) Evaporation rate	: No data available
j) Flammability (solid, gas)	: NA
k) Flammability or explosion limits	
Lower explosion limit(LEL)	: 20g/ m <sup>3</sup> .
Kst:129 bar.m/s	
MIE ≤3mj	
l) Vapour pressure	: 0.82 - 0.90 KPa (25 °C)
m) Vapour density	: No data available
n) Relative density	: No data available
o) solubility in water	: Insoluble ,0.001 - 0.01 g/m <sup>3</sup> (20.5 °C)
Others	: Soluble in Benzene ,Carbon disulphide and organic
p) Partition coefficient	: Log Pow = 3.4 - 3.7 (20 °C)
q) Auto-ignition temperature	: 440°C
r) Specific gravity	: 1.4(at 20°C)
s) Bulk density	: 230-365 kg/ m <sup>3</sup>
t) Decomposition temperature	: >147°C
u) Viscosity	: Not applicable
v) Explosive properties	: No data available
w) Oxidizing properties	: No data available

### 9.2 Other information

No data available

## SECTION 10: STABILITY AND REACTIVITY

### 10.1 Reactivity

- See Incompatible Materials

### 10.2 Chemical Stability

- Stable under recommended storage and handling conditions (See section 7)



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#### **10.3 Possibility of hazardous reactions**

- Risk of dust explosion

#### **10.4 Conditions to Avoid**

- No relevant information available

#### **10.5 Incompatible materials to avoid**

- Strong oxidizing agents, Acids & bases

#### **10.6 Hazardous Decomposition Products**

- Heating or fire can release toxic gas
  - Nitrogen oxides (NO<sub>x</sub>)
  - Sulphur dioxide (SO<sub>2</sub>)
  - Carbon oxides (CO<sub>x</sub>)

### SECTION 11: TOXICOLOGICAL INFORMATION

#### **11.1 Information on toxicological effects**

<b>Acute oral toxicity</b> (LD50/oral/rat):	>5000 mg/Kg
<b>Acute dermal toxicity</b> (LD50/dermal/rabbit):	>2000 mg/Kg
<b>Acute inhalational toxicity:</b>	rat; 4 hours: >5 mg/l (max. attainable concentration).
<b>Mutagenic Effects</b>	: Not mutagenic
<b>Reproductive toxicity</b>	: None detected.
<b>Carcinogenic effects</b>	: No data available
<b>Eye irritation</b>	: Minimally Irritating
<b>Skin irritation</b>	: Practically non Irritating to skin,
<b>Sensitization</b>	: Not sensitizing (guinea pig).

### SECTION 12: ECOLOGICAL INFORMATION

#### **12.1 Ecotoxicity**

##### **Acquatic toxicity:**

EC50 > 1000 mg/L (activated sludge) (toxicity to microorganisms, 3-h)  
 EC50 Short-term 100 mg/L (Daphnia magna) (toxicity to aquatic invertebrates 24-h and 48-h)  
 EC50 Toxicity > 3.82 mg/L (Desmodesmus subspicatus) (to aquatic algae and cyanobacteria, 72-h)  
 LC50 Long-term > 9 µg/L (Daphnia magna) (toxicity to aquatic invertebrates 21-d)  
 LC50 Short-term > 32 mg/L (Poecilia reticulata) (toxicity to fish, 96-h)

**Biodegr. in water** :No inherent biodegradation (activated sludge) (28 d, no observed biodegradation)  
 no ready biodegradation (activated sludge) (ready and inherent biodegradability)

#### **12.2 Mobility in soil**

No data available

#### **12.3 Persistence and degradability**

No data available



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#### 12.4 Bioaccumulative Potential

No data available

#### 12.5 Results of PBT and vPvB assessment

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

#### 12.6 Other adverse effects

No further relevant information available

### SECTION 13: DISPOSAL CONSIDERATIONS

#### 13.1 Waste Disposal Method

##### **Product**

Must not be disposed together with household garbage. Do not allow product to reach sewage System. Dispose according to local regulations

##### **Packing**

- Dispose off in accordance with local regulations

### SECTION 14: TRANSPORT INFORMATION

#### 14.1 Road transport (ADR/RID/ADN)

ADR/RID Class : Not regulated  
UN-No : Nil  
Packing Group : None

Proper Shipping Name : Not dangerous goods

#### 14.2 Sea transport (IMDG)

ADR/RID Class : Not regulated  
UN-No : Nil  
Packing Group : None  
Marine pollutant : No  
Proper Shipping Name : Not dangerous goods

#### 14.3 Air transport (ICAO-TI/IATA)

ADR/RID Class : Not regulated  
UN-No : Nil  
Packing Group : None  
Proper Shipping Name : Not dangerous goods

#### 14.4 Other information

No data available

#### 14.5 Environmental hazards

Information on environmental hazards, if relevant, pls. see 14.1 - 14.3.



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#### **14.6 Special precautions for user**

No data available

#### **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**

Not relevant

### SECTION 15: REGULATORY INFORMATION

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

Regulation 1907/2006 REGULATION (EC) No 1272/2008

Classification according to EU directives 67/548/EEC or 1999/45/EC

#### **15.2 Chemical Safety Assessment**

For this product a chemical safety assessment was not carried out

### SECTION 16: OTHER INFORMATION

#### **This data sheet contains changes from the previous version in section(s)**

Issue No.	2
Issue date :	20.03.2015
Revision No.	0
Reason for revision	Reviewed & revamped based on the guide lines of Regulation (EC) No 1907/2006

#### **List of relevant R(isk)-phrase(s)**

R53 May cause long-term adverse effects in the aquatic

#### **List of relevant S(afety) phrase(s)**

S61 Avoid release to the environment.

#### **Training advice**

Provide adequate information, instruction and training to operators

#### **Further information for the material safety data sheet**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release.

**End of Material Safety Data Sheet**