



MERCHEM LIMITED

SAFETY DATA SHEET

MERTISER DBD
MSDS No. 36/10.07.2015

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

1.1 Product Identifier

| | |
|--------------|---|
| Product Name | Mertiser DBD |
| Synonym | O-O' Dibenzamidodiphenyldisulfide N,N'-Dithiodi-o-phenylenedibenzamide |

1.2 Use of the Substance/Mixture

| | |
|-----------------|---|
| Identified uses | Rubber processing chemical – viscosity regulator, peptizing agent |
|-----------------|---|

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 |
| Email | mail@merchem.com |

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

Xi
N
R51/53
R43

REGULATION (EC) No. 1272/2008

Skin sensitisation (Category 1)
Acute aquatic toxicity (Category 1)
Chronic aquatic toxicity (Category 1)

EC Number: 205-201-9

Annex 1 Index Number: Not available



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2.2 Label elements

Product Name: Mertiser DBD

Hazard pictograms



Signal word

Warning

Hazard statement

H317 May cause an allergic skin reaction.
H410 Very Toxic to aquatic life with long lasting effects.

Precautionary statement – Prevention

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P272 - Contaminated work clothing should not be allowed out of the workplace
P280 - Wear protective gloves/protective clothing/eye protection/face protection
P273 - Avoid release to the environment

Precautionary statement – Response

P302 +P352 - IF ON SKIN: Wash with plenty of soap and water
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention
P321 - Specific treatment (see supplemental first aid instructions on this label)
P363 - Wash contaminated clothing before reuse
P391 - Collect spillage

Precautionary statement – Storage

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

Precautionary statement – disposal

P501 - Dispose of contents/container to an approved incineration plant

2.3 Other hazards

PBT and vPvB assessment

No information available

Other hazards which do not result in classification

No information available

Note: For the full text of the R phrases, S phrases, and symbols mentioned in this Section, see Section 16



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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

Mixture containing Dibenzamidodiphenyldisulfide, Kaolin, Phthalocyanine Blue & Stearic acid in appropriate proportions to obtain the physical and chemical properties required.

Composition/Information on ingredients

| Chemical Name | CAS No. | EC No. | Annex-1 Index No. | Weight % (approx.) |
|------------------------------|-----------|-----------|-------------------|--------------------|
| Dibenzamidodiphenyldisulfide | 135-57-9 | 205-201-9 | Not available | 40 |
| Kaolin | 1332-58-7 | 310-127-6 | -- | 53 |
| Phthalocyanine Blue | 132-16-1 | --- | -- | 1 |
| Stearic acid | 57-11-4 | -- | --- | 6 |

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. In case of allergic reaction after exposure, any future exposure must be avoided.

Eye Contact

Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. Obtain medical attention.

Skin Contact

Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Thoroughly clean shoes before reuse. If skin irritation persists, call a physician.

Inhalation

Remove from exposure, lie down. Move to fresh air. If breathing is difficult, give oxygen. Immediate medical attention is required.

Ingestion

Clean mouth with water and afterwards drink plenty of water. Do not induce vomiting. Treat symptomatically. If swallowed, seek medical advice immediately and show this container or label. Loosen tight clothing such as collar, tie, belt and waistband.

4.2 Most important symptoms and effects, both acute and delayed

- Allergic reactions

4.3 Indication of immediate medical attention and special treatment needed

- No information available



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SECTION 5: FIRE FIGHTING MEASURES

5.1 Extinguishing media

| | |
|---|--|
| Suitable extinguishing media: | Dry chemical powder or water spray. Fight larger fires with water spray or alcohol resistant foam. |
| Extinguishing media which must not be used for safety reasons: | High volume water jet |

5.2 Specific hazards arising from the substance or mixture

| | |
|-------------------------|--|
| Specific hazards | Combustible material Dust may form explosive mixture in air Heating can release noxious and toxic gases: Carbon monoxide Sulphur oxides Nitrogen oxides (NOx) |
| Specific methods | Keep product and empty container away from heat and sources of ignition Do not flush into surface water or sanitary sewer system Prevent product from entering drains Collect contaminated fire extinguishing water separately. This must not be discharged into drains |

5.3 Protective Equipment and Precautions for Firefighters

Wear full protective clothing and self-contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

- Avoid contact with skin, eyes and clothing
- Evacuate personnel to safe areas
- Keep people away from and upwind of spill/leak
- Wear respiratory protection
- Wear suitable protective clothing, gloves and eye/face protection



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6.2 Environmental precautions

- Remove immediately adhering matter
- Prevent product from entering drains
- Do not flush into surface water or sanitary sewer system

6.3 Methods and materials for containment and cleaning up

- Absorb spill with inert material (e.g. dry sand or earth), then place in a chemical waste container
- Do not flush with water
- Avoid dust formation
- Use a suitable vacuum cleaner
- Use explosion-proof equipment

6.4 Reference to other sections

See section 7,8 &13

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

- Use only in area provided with appropriate exhaust ventilation
- Use spark-proof tools and explosion-proof equipment
- Avoid dust formation
- Avoid contact with skin, eyes and clothing
- Wear personal protective equipment
- Do not breathe vapours/dust
- Wash hands after handling
- Remove contaminated clothing and protective equipment before entering eating areas

7.2 Conditions for safe storage, including any incompatibilities

- In accordance with local and national regulations
- Keep in a dry, cool place
- Do not store near acids
- Do not store together with oxidizing and self-igniting products
- Use spark-proof tools and explosion-proof equipment
- Keep away from heat and sources of ignition

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



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8.2 Exposure controls

| | |
|--|--|
| Engineering Controls: | Avoid dust generation. Ensure good ventilation and Local exhaustion of the working area |
| Personal Protective Equipment: | |
| Eye/face Protection | Tightly fitting safety goggles or Face-shield |
| Skin Protection | Wear suitable protective clothing/equipment |
| Hand Protection | The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. The suitability for a specific workplace should be discussed with the producers of the protective gloves |
| Respiratory Protection | In accordance with local and national regulations In case of insufficient ventilation, wear suitable respiratory equipment. Where necessary should conform to EN 143, EN 149 or equivalent |
| Environmental exposure controls | Prevent product from entering drains Do not contaminate surface water Avoid subsoil penetration |

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

| | |
|--|--|
| Physical State | Powder/Pellets |
| Color | bluish green |
| Odor | No discernible odour |
| Boiling point/Range | Not applicable |
| Melting point/Range | 138 – 142°C (Active ingredient) |
| Flash Point | >200°C |
| Flammability | No data available |
| Auto-ignition temperature | No data available |
| Explosive properties | Product does not present an explosion hazard |
| Explosion Limit | No data available |
| Oxidizing properties | No data available |
| Vapor pressure | No data available |
| Density | 1.6-1.9 g/cm ³ |
| Bulk density | 700-750 kg/m ³ |
| Solubility in water | practically insoluble |
| pH | No data available |
| Partition coefficient (n-Octanol-water) | No data available |



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Relative vapor density

No data available

Viscosity

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)

10.3 Possibility of hazardous reactions

- See Incompatible Materials

10.4 Conditions to Avoid

- Avoid dust formation
- Keep away from heat and sources of ignition

10.5 Incompatible materials to avoid

- Oxidizing agents

10.6 Hazardous Decomposition Products

- Heating or fire can release toxic gas
 - Carbon oxides
 - Nitrogen oxides (NO_x)
 - Sulphur oxides

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity (LD50/oral/rat):

>300mg/Kg

Acute dermal toxicity (LD50/dermal/rabbit):

>250 mg/Kg

Acute inhalational toxicity:

May cause irritation of respiratory tract

Eye irritation:

May cause irritation and redness

Skin irritation/Sensitization:

May cause sensitization by skin contact

Mutagenic Effects

No data available on this product

Reproductive toxicity:

No data available on this product

Carcinogenic effects:

No data available on this product

Target Organ Effects:

No data available on this product

Human experience:

No data available on this product



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SECTION 12: ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Toxicity to fish static test LC50 - Oncorhynchus mykiss (rainbow trout) - > 10 mg/l - 96 h

12.2 Mobility in soil

Not known

12.3 Persistence and degradability

No further relevant information available

12.4 Bioaccumulative Potential

No further relevant information available

12.5 Results of PBT and vPvB assessment

No further relevant information available

12.6 Other adverse effects

None known based on information supplied

12.7 Other information

Do not allow product to reach ground water, water course or sewage system. Also, poisonous for fish and plankton in water bodies. Toxic for aquatic organisms. Do not allow product to reach ground water, water course or sewage system, even in small quantities.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste Disposal Method

Product

- Dispose of in accordance with local regulations
- Do not allow into drains, water courses or where ground/surface waters may be affected.

Packing

- Contaminated packaging should be treated as for the substance/preparation



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SECTION 14: TRANSPORT INFORMATION

14.1 Road transport (ADR/RID)

| | |
|----------------------|---|
| ADR/RID Class | 9 |
| UN No. | 3077 |
| Packing Group | III |
| Hazardous label | Hazardous for the environment |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-Dibenzamido diphenyl disulfide) |

Sea transport (IMDG)

| | |
|----------------------|---|
| Class | 9 |
| UN No. | 3077 |
| Packing Group | III |
| EMS Number | F-A, S-F |
| Hazardous label | Hazardous for the environment |
| Marine pollutant | Yes |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-Dibenzamido diphenyl disulfide) |

14.2 Air transport (ICAO-TI/IATA-DGR)

| | |
|----------------------|---|
| Class | 9 |
| UN-No | 3077 |
| Packing Group | III |
| Proper Shipping Name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (2,2'-Dibenzamido diphenyl disulfide) |

14.3 Other information

No data available

14.4 Environmental hazards

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

14.5 Special precautions for user

Warning: Miscellaneous dangerous substances and articles

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

Not relevant



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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

No data available

SECTION 16: OTHER INFORMATION

| | |
|---------------------|------------------------------------|
| Issue No. | 2 |
| Issue date | 10.07.2015 |
| Revision No. | 1 |
| Reason for revision | Section :3 ; reviewed and updated. |

Classification of dangerous substance directive (67/548/EEC)

- Xi: irritant
- N: Dangerous for the environment
- R43: May cause sensitisation by skin contact.
- R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic 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