

Safety Data Sheet
According to Regulation (EU) No. 1907/2006
MBTS

SDS Record Number: CSSH-TCO-010-120953

Printing date: 15/01/2021

Version 1.2

Revision date: 15/01/2021

1 Identification of the substance and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: MBTS
Additional identification: di(benzothiazol-2-yl) disulphide
Identification of the product: CAS#120-78-5; EC#204-424-9
Index Number: 613-135-00-0
REACH registration No.: 01-2119489366-24-XXXX

1.2 Relevant identified uses of the substance and uses advised against:

1.2.1 Identified uses:

Production of tyres and general rubber goods
Tyre mounting and dismounting and handling of technical rubber goods Retreading
Use of tyres and general rubber goods

1.2.2 Uses advised against:

Not available.

1.3 Details of the supplier of the safety data sheet:

Supplier(Only representative): Chemical Inspection & Regulation Service Limited
Supplier(Manufacturer): Shandong Sunsine Chemical Co., Ltd.
Address: Economy & Technical Development Zone, Shanxian City, Shandong Province, China.
Contact person(E-mail): sale@sunsine.com
Telephone: +86 530 4686360
Fax: +86 530 4684121

1.4 Emergency telephone Number:

+353 41 980 6916

Available outside office hours?

YES

☐

NO

☒

2 Hazards Identification

2.1 Classification of the substance

2.1.1 Classification:

The substance is classified as following according to 67/548/EEC and REGULATION (EC) No 1272/2008:

REGULATION (EC) No 1272/2008	
Hazard classes/Hazard categories	Hazard codes
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

For full text of H- phrases: see section 2.2.

2.2 label elements

Hazard Pictograms:



Signal Word(S):

Hazard Statement:

Precautionary Statement:

Warning
H317 May cause an allergic skin reaction.
P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
P272: Contaminated work clothing should not be allowed out of the workplace.
P273: Avoid release to the environment.
P280: Wear protective gloves/protective clothing/eye protection/face protection.

Chemical Inspection & Regulation Service Limited

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P302 + P352: IF ON SKIN: Wash with plenty of water.

P333 + P313: If skin irritation or rash occurs: Get medical advice/ attention.

2.3 Other hazards

Not available.

3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
di(benzothiazol-2-yl) disulphide	01-2119489366-2 4-XXXX	120-78-5	204-424-9	≥98
Distillates(petroleum),hydrotreated heavy naphthenic	N/A	64742-52-5	265-155-0	≤1.5%
Unknown impurity	N/A	N/A	N/A	≤0.5%

4 First aid measures

4.1 Description of first aid measures:

In all cases of doubt, or when symptoms persist, seek medical attention.

4.1.1 In case of inhalation:

Move exposed person to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

4.1.2 In case of skin contact:

Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

4.1.3 In case of eyes contact:

Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.

4.1.4 In case of ingestion:

Get medical attention immediately. Wash out mouth with water. Move exposed person to fresh air. Keep person warm and at rest. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

4.2 Most important symptoms and effects, both acute and delayed:

May cause an allergic skin reaction.

4.3 Indication of any immediate medical attention and special treatment needed:

If skin irritation or rash occurs, get medical advice/attention.

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5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: In case of fire, use water spray (fog), foam, dry chemical or CO₂.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture:

No specific fire or explosion hazard. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. This material is very toxic to aquatic organisms. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain. Decomposition products may include the following materials: carbon oxides nitrogen oxides sulfur oxides.

5.3 Advice for firefighters:

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training.

Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Put on appropriate personal protective equipment.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if dust is generated.

6.2 Environmental Precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

6.3 Methods for Containment and Cleaning up:

Large spill: Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor. Note: see section 1 for emergency contact information and section 13 for waste disposal.

Small spill: Move containers from spill area. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for information on disposal.

7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

Put on appropriate personal protective equipment (see section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Keep

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away from acids. Empty containers retain product residue and can be hazardous.

7.1.2 Advice on general occupational hygiene:

Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities:

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well ventilated area, away from incompatible materials (see section 10) and food and drink. Separate from acids. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination.

Packaging materials Recommended : Use original container

Remarks: Take precautionary measures against electrostatic discharges.

7.3 Specific end use(s):

Not applicable.

8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: Not available.

8.1.2 Additional exposure limits under the conditions of use: Not available.

8.1.3 DNEL/DMEL and PNEC-Values:

Workers - Hazard via inhalation route-Systemic effects-Long term exposure-DNEL

(Derived No Effect Level): 8.8 mg/m³

Workers - Hazard via inhalation route-Systemic effects- Acute/short term exposure-DNEL (Derived No Effect Level): 70mg/m³

Workers - Hazard via dermal route- Systemic effects- Long term exposure- DNEL

(Derived No Effect Level): 5 mg/kg bw/day

Workers - Hazard via dermal route- Systemic effects- Acute/short term exposure - DNEL (Derived No Effect Level): 40 mg/kg bw/day

General Population - Hazard via inhalation route- Systemic effects- Long term exposure- DNEL (Derived No Effect Level): 2.2mg/m³

General Population - Hazard via inhalation route- Systemic effects- Acute/short term exposure - DNEL (Derived No Effect Level): 17.6mg/m³

General Population - Hazard via dermal route- Systemic effects- Long term exposure- DNEL (Derived No Effect Level): 25mg/kg bw/day

General Population - Hazard via dermal route- Systemic effects- Acute/short term exposure - DNEL (Derived No Effect Level): 20mg/kg bw/day

General Population - Hazard via oral route- Systemic effects- Long term exposure- DNEL (Derived No Effect Level): 1.25 mg/kg bw/day

General Population - Hazard via oral route- Systemic effects- Acute/short term exposure - DNEL (Derived No Effect Level): 10 mg/kg bw/day

Hazard for aquatic organisms- PNEC aqua (freshwater): 0.027mg/L

Hazard for aquatic organisms- PNEC aqua (marine water): 0.003mg/L

Hazard for aquatic organisms- PNEC STP: 3.8 mg/L

Hazard for aquatic organisms- PNEC sediment (freshwater): 14.27 mg/kg sediment dw

Hazard for aquatic organisms- PNEC sediment (marine water): 1.427 mg/kg sediment dw

Hazard for terrestrial organisms- PNEC soil: 2.83mg/kg soil dw

8.2 Exposure controls

8.2.1 Appropriate engineering controls:

Avoid dust generation. Ensure good ventilation and local exhaustion of the working area.

8.2.2 Individual protection measures, such as personal protective equipment:

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Eye/face protection	Wear appropriate goggles to prevent eye exposure.
Hand protection	Wear appropriate gloves to prevent skin exposure.
Body protection	Wear suitable protective clothing to prevent skin exposure.
Respiratory protection	Avoid breathing dust. In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear suitable protective clothing to prevent heat.

8.2.3 Environmental exposure controls:

Avoid discharge into the environment.

According to local regulations, Federal and official regulations.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Granule
Colour:	Pale yellow
Odour:	Not available
Odour threshold:	Not available
pH:	Not available
Melting point/range (°C):	164-179 °C
Boiling point/range (°C) :	240 °C
Flash point (°C) :	Not available
Evaporation rate:	Not applicable
Flammability (solid, gas);	Not a readily combustible solid
Ignition temperature (°C) :	Not available
Upper/lower flammability/explosive limits:	Not available.
Vapour pressure (25°C) :	1.35×10^{-9} hPa
Vapour density:	Not applicable
Relative Density:	1.5g/cm ³
Bulk density (kg/m ³) :	Not available
Water solubility (g/l) :	0.27-0.37mg/l
n-Octanol/Water (log Po/w) :	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity, dynamic (mPa s) :	Not determined
Explosive properties:	Not determined
Oxidising properties:	Not applicable
Molecular Formula:	C ₁₄ H ₈ N ₂ S ₄
Molecular Weight:	332.49

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	Not available
Surface tension:	Not available
Dissociation constant in water(pKa):	pKa(HL/H+L): ca. -0.59 at 25 °C pKa(H ₂ L/H+HL): ca. 0.9 at 25 °C
Oxidation-reduction Potential:	Not available

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10 Stability and reactivity

10.1 Reactivity:

The substance is stable under normal storage and handling conditions.

10.2 Chemical stability:

Stable at room temperature in closed containers under normal storage and handling conditions.

10.3 Possibility of hazardous reactions:

Hazardous reactions or instability may occur under certain conditions of storage or use. Conditions may include the following: contact with acids. Reactions may include the following: liberation of toxic gas.

10.4 Conditions to avoid:

Incompatible materials. Take precautionary measures against static discharges. In the case of dusty organic products the possibility of a dust explosion should always be considered.

10.5 Incompatible materials:

Acids.

10.6 Hazardous decomposition products:

Contact with acids liberates toxic gas.

11 Toxicological information

11.1 Toxicokinetics, metabolism and distribution

Non-human toxicological data: Not available

Method: Not available

Dosis: Not available

Routes of administration: Not available

Results: Not available

Absorption: Not available

Distribution: Not available

Metabolism: Not available

Excretion: Not available

11.2 Information on toxicological effects

Acute toxicity:

LD50(Oral, Rat): >7940 mg/kg

LD50(Dermal Rabbit): > 7940 mg/kg

LD50(Inhalation, Rat): Not available

Skin corrosion/Irritation: Not classified

Serious eye damage/irritation: Not classified

Respiratory or skin sensitization: May cause an allergic skin reaction.

Germ cell mutagenicity: Not classified

Carcinogenicity: Not classified

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reproductive toxicity:	Not classified
STOT- single exposure:	Not classified
STOT-repeated exposure:	Not classified
Aspiration hazard:	Not classified

12 Ecological information

Toxicity:

Acute toxicity		Time	Species	Method	Evaluation	Remarks
LC50	N/A	96h	Fish	OECD 203	N/A	N/A
LC50	N/A	48h	Daphnia	OECD 202	N/A	N/A
EC50	N/A	72h	Algae	OECD 201	N/A	N/A

Persistence and degradability:	Not readily biodegradability.
Bioaccumulative potential:	Not bioaccumulative.
Mobility in soil:	Not available.
Results of PBT&vPvB assessment:	Neither PBT nor vPvB.
Other adverse effects:	Very toxic to aquatic life with long lasting effects.

13 Disposal considerations

13.1 Waste treatment methods

The material should be disposed of by incineration in a chemical incinerator in compliance with national and regional requirements.

14 Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	Not regulated	Not regulated	Not regulated
UN Proper shipping name:	Not regulated	Not regulated	Not regulated
Transport hazard Class:	Not regulated	Not regulated	Not regulated
Packaging group:	Not regulated	Not regulated	Not regulated
Environmental hazards:	Not regulated	Not regulated	Not regulated
Special precautions for user:	See section 2.2	See section 2.2	See section 2.2
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	Not regulated	Not regulated	Not regulated

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15 Regulation information

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

Relevant information regarding authorization: Not applicable.

Relevant information regarding restriction: Not applicable.

Other EU regulations: Employment restrictions concerning young person must be observed. For use only by technically qualified individuals.

Other National regulations: Not applicable

Chemical Safety Assessment has been carried out? YES ☐ NO ☒

16 Other information

16.1 Indication of changes Version 1.2 Amended by EU No 2015/830

16.2 Training instructions:

Not applicable.

16.3 Further information:

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.

16.4 Notice to reader:

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgment of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.