

Safety Data Sheet
According to Regulation (EU) No. 1907/2006, Annex II,
According to Regulation (EU) No. 1272/2008,
Amended by REGULATION (EU) No 453/2010

MBTS

SDS Record Number: **CSSS-TCO-010-110056**
Version 1.1 Revision date: 16/02/2011

Printing date: 16/02/2011

1 Identification of the substance and of the company/undertaking

1.1 Product identifier:

Identification on the label/Trade name: MBTS
Additional identification: 2,2'-Dithiobisbenzothiazole Disulfide
Identification of the product: CAS#120-78-5; EC#204-424-9
Index Number: 613-135-00-0
REACH registration No.: Not available

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

1.2.1 Identified uses:

Used as rubber accelerator.

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): Shanghai Rokem International Co., Ltd
Address: 9D, Double Dove Great Tower, 438, Pudian Road. Shanghai, 200122, P.R.CHINA
Contact person(E-mail): -
Telephone: +86-21-50812951
Fax: +86-21-58818728

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 statement
Skin Sens. 1	H317
Aquatic Acute 1	H400
Aquatic Chronic 1	H410

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

67/548/EEC	
Hazards characteristics	R-Phrases
Xn	R43
N	R50/53

For full text of R- phrases: see section 16.

2.1.2 The most important adverse effects

2.1.2.1 The most important adverse physicochemical effects:

Not applicable.

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2.1.2.2 The most important adverse human health effects:

May cause an allergic skin reaction.

2.1.2.3 The most important adverse environmental effects:

Very toxic to aquatic life with long lasting effects.

2.2 label elements

Hazard Pictograms:



Signal Word(S):

Warning

Hazard Statement:

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

Precautionary Statement:

P261 Avoid breathing dust/fume/gas/mist/vapors/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.
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.
P333 + P313 If skin irritation or rash occurs: Get medical advice/attention.
P363 Wash contaminated clothing before reuse.
P391 Collect spillage.
P501 Dispose of contents/container to local regulations.

2.3 Other hazards

EUH031 Contact with acids liberates toxic gas.

3 Composition/information on ingredients

Substance/Mixture: Substance

Ingredient(s):

Chemical Name	Registration No.	CAS No.	EC No.	Concentration
2,2`-Dithiobisbenzothiazole Disulfide	N/A	120-78-5	204-424-9	≥98%

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:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

4.1.2 In case of skin contact:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

4.1.3 In case of eyes contact:

Remove contact lenses. Hold eyelids apart. Flush immediately with water for at least 15 minutes. Seek medical attention.

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4.1.4 In case of ingestion:

Rinse mouth. Give water to drink. Induce vomiting. Never induce vomiting in unconscious or confused persons. Always seek medical advice.

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.

5 Fire-Fighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Carbon dioxide, appropriate foam or dry chemical, water spray, water mist.

Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture

Emits toxic fumes under fire conditions: Carbon monoxide (CO), Sulfur oxides (SOx), nitrous gases (NOx).

5.3 Advice for fire-fighters:

Firefighters must wear fire resistant protective equipment. Wear self contained breathing apparatus and protective gloves.

6 Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

6.1.1 For non-emergency personnel:

Remove ignition sources. Provide adequate ventilation. Avoid inhalation of vapour or dust. Avoid skin and eye contact.

6.1.2 For emergency responders:

Wear an appropriate NIOSH/MSHA approved respirator if mist, vapor or dust is generated.

6.2 Environmental Precautions:

Avoid disposing into drainage/sewer system or directly into the aquatic environment. Keeping away from drains, surface-and ground-water and soil.

6.3 Methods for Containment and Cleaning up:

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. Clean up affected area.

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.

6.5 Additional information:

Wet clean or vacuum up solids.

Don't use a brush or compressed air for cleaning surfaces or clothing.

Clear spills immediately.

7 Handling and storage

7.1 Precautions for safe handling:

7.1.1 Protective measures:

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Avoid contact with skin and eyes. Avoid dust generation. Take precautionary measures against static discharges.

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 a cool, dry and well ventilated place. Keep away from sources of ignition - No smoking. Keep container tightly closed. Store separately from oxidizing agents.

7.3 Specific end use(s):

Not applicable.

8 Exposure control/personal protection

8.1 Control parameters:

8.1.1 Occupational exposure limits: OES-TEA 5.0mg/m³.

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

8.1.3 DNEL/DMEL and PNEC-Values: Not available.

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:

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. This material and its container must be disposed of as hazardous waste.

According to local regulations, Federal and official regulations.

9 Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	Dedusted powder
Colour:	Paint white
Odour:	Aromatic
Odour threshold:	Not available
pH:	Not determined
Melting point/range (°C):	~167°C
Boiling point/range (°C) :	260°C
Flash point (°C) :	250°C
Evaporation rate:	Not determined
Flammability (solid, gas);	Not determined
Ignition temperature (°C) :	Approx 440-460°C
Upper/lower flammability/explosive limits:	Not determined
Vapour pressure (20°C) :	Negligible at room temperatures
Vapour density:	Not applicable
Relative Density (25°C):	1.54 g/cm ³
Bulk density (kg/m ³) :	320-360 kg/m ³ (20°C)

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Water solubility (g/l) :	0.088kg/m3(PH5)	0.049kg/m3(PH9)
n-Octanol/Water (log Po/w) :	4.5	
Auto-ignition temperature:	Not available	
Decomposition temperature:	Not available	
Viscosity, dynamic (mPa s) :	Not determined	
Explosive properties:	Lower:30-40g/m3	
Oxidising properties:	Not applicable	

9.2. Other information:

Fat solubility(solvent– oil to be specified) etc:	Soluble in CS2, benzene
Surface tension:	Not available
Dissociation constant in water(pKa):	Not available
Oxidation-reduction Potential:	Not available

10 Stability and reactivity

10.1 Reactivity:

The substance is stable under normal storage and handling conditions.

10.2 Chemical stability:

Stable when stored at room temperature in closed, original container. Stable under normal conditions of handling, use and transportation.

10.3 Possibility of hazardous reactions:

Under normal conditions, not hazardous reactions will occur.

10.4 Conditions to avoid:

Heating>250°C: May catch fire.

10.5 Incompatible materials:

Strong oxidizing agents, acids.

10.6 Hazardous decomposition products:

Thermal decomposition products: carbon monoxide (CO), nitrous gases (NOx), Sulfur oxides (SOx). 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

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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:	Slightly irritating to skin but not sufficient for classification.
Serious eye damage/irritation:	Slightly irritating to eyes but not sufficient for classification.
Respiratory or skin sensitization:	May cause sensitization by skin contact.
Germ cell mutagenicity:	Not classified
Carcinogenicity:	Not classified
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	82 mg/l	96h	Fish(Lepomis macrochirus)	OECD 203	N/A	N/A
EC50	82 mg/l	48h	Daphnia	OECD 202	N/A	N/A
EC50	0.7 mg/l	96h	Algae	OECD 201	N/A	N/A

Persistence and degradability: Not readily biodegradable.

Bioaccumulative potential: Not applicable.

Mobility in soil: Not available.

Results of PBT&vPvB assessment: Not available.

Other adverse effects: Not applicable.

13 Disposal considerations

13.1 Waste treatment methods

Avoid discharge into the environment. This material and its container must be disposed of as hazardous waste. According to local regulations, Federal and official regulations.

13.2 Product / Packaging disposal:

If empty container retains product residues, all label precautions must be observed. Return for reuse or dispose according to national or local regulations. .

14 Transport information

	Land transport (ADR/RID)	Sea transport (IMDG)	Air transport (ICAO/IATA)
UN-Number:	UN3077	UN3077	UN3077

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UN Proper shipping name:	Environmentally hazardous substance, solid, n.o.s. (MBT)	Environmentally hazardous substance, solid, n.o.s. (MBT)	Environmentally hazardous substance, solid, n.o.s. (MBT)
Transport hazard Class:	9	9	9
Packaging group:	III	III	III
Environmental hazards:	Environmentally hazardous substances	Environmentally hazardous substances	Environmentally hazardous substances
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	IBC 08	IBC 08	IBC 08

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 1.1 Amended by EU No 453/2010

16.2 Relevant R- phrases (number and full text):

R43 May cause sensitization by skin contact.
R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.3 Training instructions:

Not applicable.

16.4 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.

16.5 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.