MBTS OILED POWDER

ROKEM Version 1.3 Revision date: 8/19/2023

Material Safety Data Sheet

1. Identification of the substance/preparation and the the company

Product name: MBTS

Supplier: Shanghai Rokem Industrial Co., Ltd

9D, Double Dove Great Tower,

438, Pudian Road.

Shanghai, 200122, P.R.CHINA

Tel: +86-21-68751257

Emergency telephone: +86-21-50812951, 58818728 (Fax)

Application: Rubber accelerator

2. Composition/information on ingredients

CHEMICAL NAME: 2,2'-Dithiobis(benzothiazole)

EC number: 204-424-9 Annex-1 number: 613-135-00-0

CAS REGISTRY NUMBER: 120-78-5

MOLECULAR FORMULA: C14-H8-N2-S4

MOLECULAR WEIGHT: 332.47

Symbol(s): Xi N

R-phrases: R31, R43 R50/53

3. <u>Hazards Identification</u>

Contact with acids liberates toxic gas.

May cause sensitization by skin contact.

Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

4. First aid measures

General advise if inhaled: Consult physician if irrigation of respiratory passages occurs

On skin contact : wash with soap and plenty of water

On contact with eyes : Wash with plenty of water

On ingestion : Seek medical advice immediately

5. Fire fighting measures

Suitable extinguishing media: water spray, sands, foam, carbon dioxide

Unsuitable extinguishing media: Waterjet

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Special protective equipment: use breathing apparatus, wear full protective suit

6. Accident release measures

Environmental precautions: do not discharge into the drains or groundwater Method for cleaning up: collect onto absorbent, place in suitable container

7. Handling and storage

Handling: Avoiding crash when transporting; Avoiding formation and deposition of dust.

Ensure efficient exhaust ventilation in the working area. Wash thoroughly with soap and water after handing.

Take precautionary measures against static discharges, sparks, fires etc.

Storage: Keep in dry and cool place.

8. Exposure control and personal protection

Personal protective equipment:

Respiratory protection: Respirators Hand protection: Rubber gloves

Eye protection: Goggles

Body protection: Light protection clothing

General safety and hygiene measures: Avoid contact with eyes and skin, do not inhale dust Wash thoroughly with soap and water immediately after work. Change contaminated clothes.

9. Physical and chemical properties

Appearance: pain white powder

Odor: aromatic

Melting point: about 167 Deg C

Flash point: not determined (250 Deg C)

Soluble in water: 0.088kg/ m3 (PH 5)

0.049kg/m3 (PH 9)

Soluble in other solvents: CS2, benzene

Density: 1540kg/ m3 (20 Deg C)

10. Stability and reactivity

Stability Stable under recommended storage and handling conditions

(see section 7).

Conditions to avoid Heating > 250 °C: May catch fire. Materials to avoid strong oxidising agents, acids

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|-------------------------|---|--------------------------|
| Hazardous decomposition | Thermal decomposition products: carbon monoxide (CO), | |
| | nitrous gases (NOx), Sulfu | ır |
| Products | oxides (SOx). | |
| | Contact with acids liberate | es toxic gas. |

11. Toxicological information

Acute toxicity

Oral LD50 rat: >7940 mg/kg. Dermal LD50 rabbit: >7940 mg/kg.

Irritation

Skin Overall mean EU skin irritation scores:

> Redness: 0.0. Swelling: 0.0. Non-irritating.

Overall mean EU eye irritation scores: Eye

> Conjunctival redness: 0.2. Conjunctival swelling: 0.1.

Iris lesions: 0.0 Cornea opacity: 0.0

Slightly irritating to eyes but not sufficient for classification.

Maximisation test (guinea pig): Sensitizing (skin). Sensitization

Not mutagenic (in vitro) Genotoxicity

Not teratogenic Other toxicological Not embryotoxic (rat)

information

Human experience:

Patch testing: Not sensitizing, Non-irritating.

Prolonged or repeated skin contact: May cause sensitization in

susceptible individuals.

12. Ecological information

Ecotoxicity

fish 96h-LC50 (Lepomis macrochirus): 82 mg/l.

96h-LC50 (Oncorhynchus mykiss): 66 mg/l. 96h-LC50 (Pimephales promelas): > 1000 mg/l.

48h-EC50 (Daphnia magna): 82 mg/l. daphnia

algae 96 h-EC50 (Selenastrum capricornutum; Cell count): 0.7 mg/l.

Fate

Degradation Biotic Not readily biodegradable

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13.Disposal Considerations

Avoid discharge into the environment

May be incinerated in a suitable facility provided local regulations are observed.

14. Transport information

UN Number: 3077 PG: III

ADR/RID: 9

Hazard Identification no: 90

Proper shipping name: Environmentally hazardous substance, solid, n.o.s.

(2,2'-Dithiobis(benzothiazole))

15. Regulatory Information

Labeling is in accordance with EC directives

EC-number: 204-24-9 Symbol(s): IRRITANT(Xi)

DANGEROUS FOR THE ENVIRONMENT(N)

2,2'-Dithiobis(benzothiazole)

Risk phrases: R 31 Contact with acids liberates toxic gas

R 43 May cause sensitization by skin contact

R 50/53 Very toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment

Safety phrases: S 36/37 Wear suitable protective clothing and gloves

S 60 This material and its container must be disposed of as hazardous

waste

S 61 Avoid release to the environment. Refer to special

instructions/Safety data sheets

16. Other information

It must be recognized that the physical and chemical properties of any product may not be fully understood and that new, possibly hazardous products may arise from reactions between chemicals. The information given in this data sheet is based on our present knowledge and shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.