

## BISOCTRIZOLE

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Chemical Name: 2,2'-Methylenebis(6-(benzotriazol-2-yl)-4-tert-octylphenol)  
INCI Name: METHYLENE BIS-BENZOTRIAZOLYL TETRAMETHYLBUTYLPHENOL  
Other names: Bisoctrizole, UV-360, MBBT  
MFCI Code: Mfsorb 508  
CAS No.: 103597-45-1  
EINECS No.: 403-800-1  
Reach Dossier Type: /  
Registration number: /

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Relevant identified uses

Antioxidant

#### 1.3. Details of the supplier of the safety data sheet

Manufacturer: MFCI Co., Ltd.  
Contact address: Room 2501, Block B, WANDA PLAZA, 30# Huahu Avenue, Huangshi,  
Hubei, China  
Telephone: +86-714-6516706  
Fax: +86-714-6516705  
E-mail: service@mfc.com.cn

#### 1.4. Emergency telephone number

Opening hours: 8:30-17:30, Monday-Friday  
Telephone: +86-714-6552881

### SECTION 2: Hazards Identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Aquatic Chronic 4  
H413

#### 2.2. Label elements

##### Labelling according to Regulation (EC) No 1272/2008

##### Hazard Pictogram

No symbol.

##### Signal Word

No signal word.

##### Hazard Statements

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

##### Precautionary Statements

P273-Avoid release to the environment.  
P501-Dispose of contents/container to an approved waste disposal plant.

#### 2.3. Other hazards

No data available.

### SECTION 3: Composition/Information on Ingredients

#### 3.1. Substances

Name: Bisotrizole  
CAS Number: 103597-45-1  
EC-Number: 403-800-1  
Purity: ≥99.0%

### 3.2. Mixtures

Not applicable

## SECTION 4: First Aid Measures

### 4.1. Description of first aid measures

#### In case of inhalation

Fresh air. Seek medical attention if necessary. In case of irritation of the respiratory system or mucous membranes, seek medical attention.

#### In case of skin contact

Wash thoroughly with soap and water. Under no circumstances should organic solvent be used. If irritation develops, seek medical attention. Consult a doctor if skin irritation persists.

#### In case of eyes contact

Wash affected eyes for at least 10 minutes under running water with eyelids held open. If symptoms persist, seek medical advice.

#### In case of ingestion

Rinse mouth and drink plenty of water and seek medical attention.

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

May cause long lasting harmful effects to aquatic life.

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

Not available.

## SECTION 5: Firefighting Measures

### 5.1. Extinguishing media

Carbon dioxide, water spray, foam, dry powder.

Unsuitable extinguishing media for safety reasons: High-pressure water jet.

### 5.2. Special hazards arising from the substance

In the event of Fire, the following can be released: Carbon dioxide(CO<sub>2</sub>) ; Carbon monoxide(CO) ; Phosphoric compounds ; Combustion products of this material have to be classed invariably as respiratory poison.

Do not release chemically contaminated water into drains, soil or surface water. Sufficient measures must be taken to retain the water used for extinguishing. Dispose of contaminated water and soil according to local regulations

### 5.3. Advice for firefighters

If necessary, wear a self-contained breathing apparatus to fight the fire.

### 5.3. Further information

No data available.

## SECTION 6: Accidental Release Measures

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

Avoid breathing vapours. Do not breathe dust. Sources of ignition should be kept well clear.

Avoid contact with the skin, eyes and clothing.

### 6.2. Methods and material for containment and cleaning up

Take up mechanically and collect in suitable container (adequately labelled) for disposal. Collect

waste in suitable containers, which can be labelled and sealed. Clean up with inert, absorbent materials (sand, silica gel, acid binder, universal binder, sawdust).

## **SECTION 7: Handling and Storage**

### **7.1. Precautions for safe handling**

Handle and open container with care. Avoid dust formation. Avoid all sources of ignition: heat, sparks, open flame. Handle in accordance with good industrial hygiene practice. When using do not eat, drink or smoke. Provide good ventilation of working area (local exhaust ventilation if necessary). Close containers immediately after use.

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

Keep away from food and beverages. Keep only in the original container. Keep container tightly closed and in a cool place with adequate ventilation. Avoid vapour formation and ignition source. Do not eat, drink or smoke at the working place.

Temperature Tolerance: Protect from temperatures below 0 ° C or above 40 °C.

## **SECTION 8: Exposure Controls/Personal Protection**

### **8.1 Control parameters**

#### **Components with workplace control parameters**

### **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 workday.

#### **Eye/face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

#### **Skin protection**

The selected protective gloves have to satisfy the specifications of Regulation (EU) 2016/425 and the standard EN 374 derived from it. 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 of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

#### **Body Protection**

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

#### **Respiratory protection**

Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

#### **Control of environmental exposure**

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

## **SECTION 9: Physical and Chemical Properties**

### **9.1. Information on basic physical and chemical properties**

Appearance:

Powder

Color:

Light yellow

Odor:	Odorless.
Odor thresholds:	Not applicable
pH:	Not applicable
Melting point:	195°C
Boiling point:	Not applicable
Flash point:	>200°C
Auto-ignition temperature	No self-ignition temperature below its melting point
Oxidizing properties	No oxidising properties
Combustion characteristics (solid, gas)	Non flammable.
Flammability (solid, gas)	Highly flammable solid (A10): No
Flammability limit - lower (%)	Not applicable
Flammability limit - upper (%) N	Not applicable
Explosive limit	Not explosive.
Vapor pressure:	6E-13 Pa (25 °C)
Vapor density:	Not applicable.
Density:	1.2 g/cm <sup>3</sup> (20°C)
Relative density:	1.2
Solubility in water	0.007 mg/l
Partition coefficient	Log Pow=4.2 (20°C)

## 9.2. Other information

No further information available.

## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

Stable under recommended storage conditions.

### 10.2. Chemical stability

Stable under normal temperatures and pressures

### 10.3. Possibility of hazardous reactions

No hazardous reactions to be specially reported

### 10.4. Conditions to avoid

No conditions are known to be avoided.

### 10.5. Incompatible materials

Strong oxidizing agents; Strong bases.

### 10.6. Hazardous decomposition products

Carbon oxides; Oxides of phosphorus.

## SECTION 11: Toxicological Information

### 11.1 Toxicokinetics, metabolism and distribution

Not available

### 11.2 Information on toxicological effects

#### Acute toxicity

##### Oral

LD50 (rat): >2000 mg/kg bw

##### Dermal

LD50 (rat): > 2000 mg/kg bw

##### Inhalation

Not applicable

**Skin corrosion/irritation**

Non-irritant in skin irritation study using rabbits

**Serious eye damage/eye irritation**

Non-irritant in eye irritation study using rabbits

**Respiratory sensitizer**

No data available

**Skin sensitizer**

Not sensitizing

**Effects after repeated exposition**

Route of exposure: oral

**NOAEL value**

1000 mg/kg bw/day (nominal), using rat

**Germ cell mutagenicity**

Test data conclusive but not sufficient for classification.

**Carcinogenicity**

Test data conclusive but not sufficient for classification

**Toxic to reproduction**

Test data conclusive but not sufficient for classification

**Aspiration toxicity**

No data available

**SECTION 12: Ecological Information**

**Acute and prolonged toxicity**

LC50 fish: > 12 mg/l/96 hours

EC50 Daphnia: > 500 mg/l/48 hours

EC50 Algae > 2 mg/l/72 hours

**Persistence and degradability**

Hydrolysis as a function of pH :

pH = 4 / 50°C : t1/2 > 276 h

pH = 7 / 50°C : t1/2 > 341 h

pH = 9 / 50°C : t1/2 > 888 h

Biodegradability

Value: 2 %

Duration of exposure: 28 days

**Bioaccumulative potential:**

No data available

**Mobility in soil:**

No data available

**Results of PBT&vPvB assessment**

Not classified as PBT or vPvB substance

**Other adverse effects**

No data available

**SECTION 13: Disposal Considerations**

**13.1 Waste treatment methods**

Allocation of a waste code number, according to the European Waste Catalogue, should be



carried out in agreement with the regional waste disposal company.

#### Contaminated packaging

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer

#### Local disposal regulations

Dispose in accordance with all applicable regulations.

### SECTION 14: Transport Information

#### 14.1. UN number

ADR/RID: -	IMDG: -	IATA: -
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#### 14.2. UN proper shipping name

ADR/RID:	Not dangerous goods.
IMDG:	Not dangerous goods.
IATA:	Not dangerous goods.

#### 14.3. Transport hazard class(es)

ADR/RID: -	IMDG: -	IATA: -
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#### 14.4. Packing group

ADR/RID: -	IMDG: -	IATA: -
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#### 14.5. Environmental hazards

ADR/RID: -	IMDG: -	IATA: -
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#### 14.6. Special precautions for user

ADR/RID: NO	IMDG: No	IATA: No
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#### 14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

No data available.

### SECTION 15: Regulatory Information

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

##### EU regulations

##### Authorisations and/or restrictions on use

##### Authorisations:

Not applicable

##### Restrictions on use:

Not applicable

##### Other EU regulations

##### Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex I

Not listed.

##### Regulation (EC) No. 2037/2000 on substances that deplete the ozone layer, Annex II

Not listed.

##### Regulation (EC) No. 850/2004 on persistent organic pollutants, Annex I

Not listed.

##### Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 1

Not listed.

##### Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 2

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex I, part 3**

Not listed.

**Regulation (EC) No. 689/2008 concerning the export and import of dangerous chemicals, Annex V**

Not listed.

**Directive 96/61/EC concerning integrated pollution prevention and control (IPPC): Article 15, European Pollution Emission Registry (EPER)**

Not listed.

**Regulation (EC) No. 1907/2006, REACH Article 59(1). Candidate List**

Not listed.

**Other regulations, restrictions and prohibition regulations:**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended and respective national laws implementing EC directives. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006 as amended; 96/82/EC (Seveso II) Directive; Part 2 (Classified Substances) - Dangerous for the Environment

**National regulations**

Follow national restrictions on the use of lead. Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work. Pregnant women should not work with the product, if there is the least risk of exposure. Follow national regulation for work with chemical agents.

**Chemical Safety Assessment:**

Chemical Safety Assessment has been carried out for this substance by the supplier

**SECTION 16: Other Information**

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Revision #2

Date: 8/18/2020

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.