

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: Bisotrizole, 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: 1941-4-1#Hubin Avenue, Huangshi, Hubei, CHINA
Telephone: +86-714-6516948
Fax: +86-714-6515778
E-mail: liu.hao@mfc.com.cn

1.4. Emergency telephone number

Opening hours: 8:30-17:30, Monday-Friday
Telephone: +86-714-6516948

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(CO₂) ; 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 ³ (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

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

SDS Creation Date: 5/1/2020

Revision #1

Date: 5/1/2020

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.