# **SAFETY DATA SHEET**

1. IDENTIFICATION

Product name:2,2'-Dibenzothiazolyl DisulfideCompany:HENAN KAILUN CHEMICAL CO.,LTD.

Address: Lijiang East Rd, Hua County, Henan Province, China

**Responsible Department:** Sales Department **Telephone:** +86-18567812865

E-mail: jackyliu@kailunchem.com

#### 2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

PHYSICAL HAZARDS Not classified

**HEALTH HAZARDS** 

Skin sensitizationCategory 1Reproductive toxicityCategory 2

**ENVIRONMENTAL HAZARDS** 

Acute aquatic hazard Category 1
Long-term aquatic hazard Category 1

**Label elements** 

Pictograms or hazard symbols



Signal word Warning

Hazard statements May cause an allergic skin reaction

Suspected of damaging fertility or the unborn childVery

toxic to aquatic life

Very toxic to aquatic life with long lasting effects

**Precautionary statements** 

[Prevention] Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood. Avoid

breathing dust, fume, mist, vapors or spray.

Avoid release to the environment.

Contaminated work clothing should not be allowed out of the workplace. Wear

protective gloves, protective clothing, face protection.

[Response] IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Take off

contaminated clothing. And wash it before reuse.

IF exposed or concerned: Get medical advice or attention. Collect

spillage.

[Storage] Store locked up.

[Disposal] Dispose of contents and container in accordance with local, regional, national

regulations.

#### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/mixture: Substance

**Components:** 2,2'-Dibenzothiazolyl Disulfide

Percent: >96.0%(HPLC)(N)
CAS RN: 120-78-5

**Synonyms:** 2,2'-Dithiobisbenzothiazole

Chemical Formula: C<sub>14</sub>H<sub>8</sub>N<sub>2</sub>S<sub>4</sub>

#### 4. FIRST AID MEASURES

**Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing.

Get medical advice/attention.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plentyof

soap and water. Get medical advice/attention.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if presentand

easy to do. Get medical advice/attention.

**Ingestion:** Get medical advice/attention.Rinse mouth.

**Protection of first-aiders:** A rescuer should wear personal protective equipment, such as rubber gloves and air-

tight goggles.

## 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing** Dry chemical, foam, water spray, carbon dioxide.

media:

Specific hazards arising from Take care as it may decompose upon combustion or in high temperatures to

the chemical: generate poisonous fume.

Precautions for firefighters: Fire-extinguishing work is done from the windward and the suitable

fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of fire in the

surroundings: Remove movable containers if safe to do so.

Special protective equipment When extinguishing fire, be sure to wear personal protective equipment

for firefighters:

# **6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions,** Use personal protective equipment. Keep people away from and upwind of spill/leak.

**protective equipment and**Entry to non-involved personnel should be controlled around the leakagearea by roping off,

emergency procedures: etc.

Environmental precautions: Be careful not to let it flow into rivers, etc., since adverse effects on the

environment are concerned.

Methods and materials for containment and cleaningup:

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collected material should be promptly disposed of, in accordance withappropriate laws and

regulations.

# 7. HANDLING AND STORAGE

Precautions for safe handling

Technical measures: Handling is performed in a well ventilated place. Wear suitable protective

equipment. Prevent dispersion of dust. Wash hands and face thoroughly after

handling.

Use a closed system if possible. Use a local exhaust if dust or aerosol will begenerated.

Advice on safe handling: Avoid all contact!

Conditions for safe storage, including anyincompatibilities

**Storage conditions:** Keep container tightly closed. Store in a cool and dark place.

Store locked up.

Store away from incompatible materials such as oxidizing agents.

Packaging material: Comply with laws.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**Engineering controls:** Install a closed system or local exhaust. Also install safety shower and eye bath.

Personal protective equipment

Respiratory protection: Dust respirator, self-contained breathing apparatus(SCBA), supplied air respirator, etc. Use

respirators approved under appropriate government standards and follow local and

national regulations.

**Hand protection:** Impervious gloves.

**Eye protection:** Safety goggles. A face-shield, if the situation requires.

**Skin and body protection:** Impervious protective clothing. Protective boots, if the situation requires.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state (20°C): Solid

Form: Crystal - Powder

Colour: White - Pale yellow green

Odour: No data available pH: No data available

Melting point/freezing point: 178°C

**Boiling point/range:**No data available **Flash point:**No data available

Flammability or explosive

limits:

Lower: No data available
Upper: No data available
Relative density: No data available

Solubility(ies):

[Water] No data available [Other solvents] No data available

## 10. STABILITY AND REACTIVITY

**Chemical stability:** Stable under proper conditions.

**Possibility of hazardous** No special reactivity has been reported.

reactions:

Incompatible materials: Oxidizing agents

Hazardous decomposition Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Sulfur oxides

products:

# 11. TOXICOLOGICAL INFORMATION

Acute Toxicity: orl-rat LD50:>12 g/kg

ivn-mus LD50:180 mg/kg skn-rbt LD50:>7940 mg/kg

Skin corrosion/irritation: No data available
Serious eye No data available

damage/irritation:

**Germ cell mutagenicity:** No data available

Carcinogenicity:

IARC = No data available

NTP = No data available

Reproductive toxicity: No data available

RTECS Number: DL4550000

#### 12. ECOLOGICAL INFORMATION

**Ecotoxicity:** 

Fish: 48h LC50:19 ppm (Oryzias latipes)

Crustacea: No data available
Algae: No data available
Persistence / degradability: 0.8 % (by BOD)

Bioaccumulative 1.0 - 7.2 (conc. 0.2 ppm), 1.4 - 51 (conc. 0.02 ppm)

potential(BCF): Mobility in soil

Log Pow: No data available Soil adsorption (Koc): No data available Henry's

Law (PaM 3/mol): No data available

## 13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber system. Observe all federal, state and local regulations when disposing of the substance.

#### 14. TRANSPORT INFORMATION

**Hazards Class:** 9: Miscellaneous dangerous goods.

UN-No: 3077

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

Packing group: III
Marine pollutant Y

# 15. REGULATORY INFORMATION

Regulations on the Control over Safety of Dangerous Chemicals (State Council announces on January 26,2002 and revised on February 16,2011): Safe use and production, the storage of a dangerous chemical, transport, loading and unloading were prescribed.