SAFETY DATA SHEET

1. IDENTIFICATION

Product name:	2-Mercaptobenzothiazole
Company:	HENAN KAILUN CHEMICAL CO.,LTD.
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Responsible Department:	Sales Department
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2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

PHYSICAL HAZARDS	Not classified
HEALTH HAZARDS	
Skin sensitization	Category 1
Carcinogenicity	Category 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 causing cancer Very 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-Mercaptobenzothiazole
Percent:	>99.0%(HPLC)
CAS RN:	149-30-4
Synonyms:	MBT
Chemical Formula:	$C_7H_5NS_2$

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 andair-tight goggles.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media:	Dry chemical, foam, water spray, carbon dioxide.
Specific hazards arising from the chemical:	Take care as it may decompose upon combustion or in high temperatures to 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 for firefighters:	When extinguishing fire, be sure to wear personal protective equipment

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry to non-involved personnel should be controlled around the leakagearea by roping off, 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 followlocal 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 - Slightly pale yellow
Odour:	Pungent
pH:	No data available
Melting point/freezing point:	180°C
Boiling point/range:	No data available
Flash point:	No data available
Flammability or explosive limits:	
Lower:	15%
Upper:	No data available
Relative density:	No data available
Solubility(ies):	
[Water]	Insoluble
[Other solvents]	
Soluble:	Acetone, Glacial acetic acid
Slightly soluble:	Ether, Alcohols, Benzene, Toluene, Acetic acid
Very slightly soluble:	Carbon tetrachloride
Log Pow:	2.41
Autoignition temperature:	628°C

10. STABILITY AND REACTIVITY

Chemical stability:	Stable under proper conditions.
Possibility of hazardous reactions:	No special reactivity has been reported.
Incompatible materials:	Oxidizing agents
Hazardous decomposition products:	Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx), Sulfur oxides

11. TOXICOLOGICAL INFORMATION

Acute Toxicity:	skn-rbt LD50:>7940 mg/kg ihl-rat LC50:>1270 mg/m^3/4Hipr-rat LD50: 300 mg/kg
Skin corrosion/irritation:	No data available
Serious eye damage/irritation:	No data available
Germ cell mutagenicity:	cyt-ham-ovr 373500 ug/L (+S9) sce-ham-ovr 351 mg/L
Carcinogenicity:	orl-rat TDLo:195 g/kg/2Y-I
IARC =	No data available
NTP =	No data available
Reproductive toxicity:	orl-rat TDLo:20227 mg/kg (multigeneration)
RTECS Number:	DL6475000

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish:	48h LC50:8.4 ppm (Oryzias latipes) 96h LC50:>2.8 mg/L (Oryzias latipes)
Crustacea:	48h EC50:0.7 mg/L (Daphnia magna)
Algae:	72h EC50:0.5 mg/L (Selenastrum capricornutum)
Persistence / degradability:	2.5 % (by BOD) , 0 % (by UV-VIS)
Bioaccumulative potential(BCF):	<0.8 (conc. 0.1 ppm) , <8 (conc. 0.01 ppm)
Mobility in soil	
Log Pow:	2.41
Soil adsorption (Koc):	1600
Henry's Law (PaM ^{3}/mol):	3.6 x 10^{-3}

13. DISPOSAL CONSIDERATIONS

Recycle to process, if possible. Consult your local regional authorities. You may be able to dissolve or mix materialwith 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.