



## MATERIAL SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION:

<b>PRODUCT CODE</b>	H0081
<b>PRODUCT NAME</b>	BENZO THIAZOLE
<b>SUPPLIER</b>	Shanghai M & U International Trade Co., Ltd. Rm 1717, No 598 North NuJiang Road 200333 Shanghai, China +86-21-32515501 32515502 sales@mu-intel.com

**FOR EMERGENCIES CALL CHEMTREC: 800-424-9300 (24-HOURS)**

### 2. HAZARD IDENTIFICATION:

#### Emergency Overview

#### OSHA Hazards

Toxic by ingestion

#### GHS Classification

Acute toxicity, Oral (Category 4)

Skin irritation (Category 3)

Eye irritation (Category 2B)

Acute aquatic toxicity (Category 3)

#### GHS Label elements, including precautionary statements

Pictogram

Signal word                      Warning

#### Hazard statement(s)

H302                      Harmful if swallowed

H316                      Causes mild skin irritation

H320                      Causes eye irritation

H402                      Harmful to aquatic life

#### Precautionary statement(s)

P305 P351 P338              IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### HMIS Classification

Health hazard              2

Flammability                1

Physical hazards            1

#### NFPA Rating

Health hazard              2

Fire                            1

Reactivity Hazard         0

### Potential Health Effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Skin	Harmful if absorbed through skin. May cause skin irritation
Eyes	May cause eye irritation.
Ingestion	Toxic if swallowed

### 3. COMPOSITION AND INFORMATION ON INGREDIENTS:

<b>Formula</b>	C7 H5 N S
<b>Molecular Weight</b>	135.19 g/mol

CAS-No	EC-No	Classification	Concentration
95-16-9	202-396-2	Acute Tox. 4; H302	60-100%

### 4. FIRST-AID GUIDE:

#### General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

#### If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

#### In case of skin contact

Wash off with soap and plenty of water. Consult a physician.

#### In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

#### If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

### 5. FIRE-FIGHTING GUIDE:

#### Conditions of flammability

Not flammable or combustible

#### Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

#### Special protective equipment for firefighters

Wear self contained breathing apparatus for fire fighting if necessary.

#### Hazardous combustion products

Hazardous decomposition products formed under fire conditions. -Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Sulphur oxides

### 6. ACCIDENTAL RELEASE GUIDE:

#### Personal precautions

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

**Environmental precautions**

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

**Methods and materials for containment and cleaning up**

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE:**

**Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. Normal measures for preventive fire protection.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place Containers which are opened must be carefully resealed and kept upright to prevent leakage.

**8. EXPOSURE AND PERSONAL PROTECTION:**

Contains no substances with occupational exposure limit values.

**Personal protective equipment:**

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multipurpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

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.

**Eye protection**

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

**Skin and body protection**

Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

**9. PHYSICAL AND CHEMICAL PROPERTIES:**

**Appearance**

Form	LIQUID
Color	DARK AMBER TO DARK BROWN
<b>Safety data</b>	
Melting point (°C)	2
Boiling point (°C)	233
Flash point (°F) Closed cup	200
Ignition temperature (°C)	565
Lower explosion limit	0.9%(V)
Upper explosion limit	8.2%(V)
Vapor pressure (mmHg@20°C)	34
Density @25 °C	1.240
Water solubility	SLIGHT
Relative vapor density	4.66
Odor	QUINOLINE, RUBBERY

## 10. STABILITY AND REACTIVITY:

### Chemical stability

Stable under recommended storage conditions.

### Materials to avoid

Strong oxidizing agents

### Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Sulphur oxides

## 11. TOXICOLOGICAL INFORMATION:

### Carcinogenicity

IARC:

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP:

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA:

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	Toxic if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

## 12. DISPOSAL RECOMMENDATIONS:

### Product

Contract a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Offer surplus and non recyclable solutions to a licensed disposal company.

### Contaminated packaging

Dispose of as unused product.

## 13. TRANSPORTATION INFORMATION:

### DOT (US)

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 14. REGULATORY INFORMATION:

### OSHA Hazards

Toxic by ingestion

### SARA 302 Components

The following components are subject to reporting levels established by SARA Title III, Section 302

Aniline	CAS-No	Revision Date
	62-53-3	1993-04-24

### SARA 313 Components

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

### SARA 311/312 Hazards

Acute Health Hazard

### Massachusetts Right To Know Components

Aniline	CAS-No	Revision Date
	62-53-3	1993-04-24

### Pennsylvania Right To Know Components

Benzothiazole	CAS-No	Revision Date
	95-16-9	
Aniline	CAS-No	Revision Date
	62-53-3	1993-04-2

### New Jersey Right To Know Components

Benzothiazole	CAS-No	Revision Date
	95-16-9	
Aniline	CAS-No	Revision Date
	CAS-No	Revision Date

62-53-3 1993-04-2

**California Prop. 65 Components**

WARNING! This product contains a chemical known to the State of California to cause cancer

Aniline	CAS-No	Revision Date
	62-53-3	2007-09-28

**15. OTHER INFORMATION:**

The information in this MSDS was obtained from current and reliable sources. However, the data is provided without any warranty, expressed or implied, regarding its correctness or accuracy. Since the conditions for use, handling, storage and disposal of this product are beyond M&U's control, it is the responsibility of the user both to determine safe conditions for use of this product and to assume liability for loss, damage, or expense arising out of the products improper use. No warranty expressed or implied regarding the product described herein will be created by or inferred from any statement or omission in the MSDS. Various federal, state, or provincial agencies may have specific regulations concerning the transportation, handling, storage, use, or disposal of this product which may not be reflected in the MSDS. The user should review these regulations to ensure full compliance.

Material Safety Data Sheet prepared by: **M & U International LLC**