

## SAFETY DATA SHEET

Issue Date 18-Jun-2025  
Revision Number 2.06

**1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING****Product identifier**

Product Name Benzothiazole

**Other means of identification**

Product Code(s) 021-01132,025-01135

**Recommended use of the chemical and restrictions on use**

Recommended Use For research use only.

Uses advised against Seek expert judgment when using for purposes other than those recommended.

**Details of the supplier of the safety data sheet****Manufacturer Address**

FUJIFILM Wako Pure Chemical Corporation  
1-2, Doshomachi 3-Chome,

Chuo-ku Osaka 540-8605, Japan

Tel : +81-6-6203-3741

Fax: +81-6-6201-5964

**Distributor**

FUJIFILM Irvine Scientific  
E. Warner Avenue, Santa Ana, CA 92705-5505, U.S.A.: +1 949 261 7800  
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**2. HAZARDS IDENTIFICATION****GHS classification****Classification of the substance or mixture**

Acute toxicity - Oral

Category 4

Acute toxicity - Dermal

Category 2

Serious eye damage/eye irritation

Category 2B

Acute aquatic toxicity

Category 3

Chronic aquatic toxicity

Category 3

**Pictograms****Signal word**

Danger

**Hazard statements**

H320 - Causes eye irritation

H302 - Harmful if swallowed

H310 - Fatal in contact with skin

H402 - Harmful to aquatic life

H412 - Harmful to aquatic life with long lasting effects

**Precautionary statements-(Prevention)**

Wash face, hands and any exposed skin thoroughly after handling Do not eat, drink or smoke when using this product Do not get in eyes, on skin, or on clothing Wear protective gloves/protective clothing/eye protection/face protection Avoid release to the environment

**Precautionary statements-(Response)**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention

IF ON SKIN: Gently wash with plenty of soap and water Immediately call a POISON CENTER or doctor/physician

Remove/Take off immediately all contaminated clothing Wash contaminated clothing before reuse  
IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell Rinse mouth

**Precautionary statements-(Storage)**

Store locked up

**Precautionary statements-(Disposal)**

Dispose of contents/container to an approved waste disposal plant

**Others**

**Other hazards** Not available

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Single Substance or Mixture** Substance

**Formula** C7H5NS

Chemical Name	Molecular weight	CAS RN	Weight-%
Benzothiazole	135.19	95-16-9	96.0

**Impurities and/or Additives:** Not applicable

**4. FIRST AID MEASURES**

**First aid measures**

**Eye contact** Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

**Skin contact** Wash skin with soap and water.

**Inhalation** Remove to fresh air.

**Ingestion** Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** No information available.

**Indication of any immediate medical attention and special treatment needed**

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES**

**Suitable Extinguishing media**

Carbon dioxide (CO2). Foam. Extinguishing powder. Sand.

**Specific hazards arising from the chemical**

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

**Explosion data**

**Sensitivity to Mechanical** none.

**Impact**

**Sensitivity to Static Discharge** none.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal precautions, protective equipment and emergency procedures** Ensure adequate ventilation, especially in confined areas.

### Environmental precautions

**Environmental precautions** See Section 12 for additional ecological information.

### Methods and material for containment and cleaning up

**Methods and material for containment and cleaning up** Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

**Methods for cleaning up** Pick up and transfer to properly labeled containers.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Technical measures** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use with local exhaust ventilation.

**Protective measures** Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

**Storage conditions** Keep container protect from light, store in well-ventilated place at room temperature (preferably cool). Keep container tightly closed. Packed with an inert gas.

**Packaging materials** Glass.

**Incompatible materials** Strong oxidizing agents.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

**Exposure limits** Not applicable

### Personal protective equipment

**Respiratory protection** Protective mask

**Hand protection** chemical protective gloves ( JIS T 8116 )

**Eye protection** protective eyeglasses or chemical safety goggles (JIS T 8147)

**Skin and body protection** Long-sleeved work clothes

### General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Form

**Color**

**Turbidity**

**Appearance**

### Odor

Colorless - reddish brown

clear

liquid

characteristic odor

<b>pH</b>	no data available
<b>Melting point/freezing point</b>	2 °C
<b>Boiling point, initial boiling point and boiling range</b>	235 °C
<b>Flash point</b>	102 °C
<b>Evaporation rate:</b>	no data available
<b>Flammability (solid, gas):</b>	no data available
<b>Upper/lower flammability or explosive limits</b>	
<b>Upper:</b>	no data available
<b>Lower:</b>	no data available
<b>Vapour pressure</b>	no data available
<b>Vapour density</b>	4.69 ( air=1 )
<b>Specific Gravity / Relative density</b>	1.243 - 1.250 g/mL (20°C)
<b>Solubilities</b>	Ethanol and acetone : Very soluble. water : practically insoluble, or insoluble .
<b>n-Octanol/water partition coefficient:(log Pow)</b>	2.01
<b>Auto-ignition temperature:</b>	no data available
<b>Decomposition temperature:</b>	no data available
<b>Viscosity (coefficient of viscosity)</b>	no data available
<b>Dynamic viscosity</b>	no data available
<b>Particle characteristics</b>	no data available

## 10. STABILITY AND REACTIVITY

### Stability

<b>Chemical stability</b>	May be altered by light.
<b>Reactivity</b>	no data available

### Hazardous reactions

None under normal processing

### Conditions to avoid

Extremes of temperature and direct sunlight, Heat, flames and sparks, static electricity, spark

### Incompatible materials

Strong oxidizing agents

### Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO<sub>2</sub>), Sulfur oxides (SO<sub>x</sub>), Nitrogen oxides (NO<sub>x</sub>)

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Benzothiazole	= 380 mg/kg ( Rat )	126 - 200 mg/kg ( Rabbit )	= 5 mg/L ( Rat ) 4 h

Chemical Name	Acute toxicity -oral- source information	Acute toxicity -dermal- source information	Acute toxicity -inhalation gas-source information
Benzothiazole	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Chemical Name	Acute toxicity -inhalation vapor- source information	Acute toxicity -inhalation dust- source information	Acute toxicity -inhalation mist- source information
Benzothiazole	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

### Skin irritation/corrosion

Chemical Name	Skin corrosion/irritation source information
Benzothiazole	Based on the NITE GHS classification results.

### Serious eye damage/ irritation

<b>Chemical Name</b>	<b>Serious eye damage/irritation source information</b>
Benzothiazole	Based on the NITE GHS classification results.
<b>Respiratory or skin sensitization</b>	
<b>Chemical Name</b>	<b>Respiratory or Skin sensitization source information</b>
Benzothiazole	Based on the NITE GHS classification results.
<b>Reproductive cell mutagenicity</b>	
<b>Chemical Name</b>	<b>germ cell mutagenicity source information</b>
Benzothiazole	Based on the NITE GHS classification results.
<b>Carcinogenicity</b>	
<b>Chemical Name</b>	<b>Carcinogenicity source information</b>
Benzothiazole	Based on the NITE GHS classification results.
<b>Reproductive toxicity</b>	
<b>Chemical Name</b>	<b>Reproductive toxicity source information</b>
Benzothiazole	Based on the NITE GHS classification results.
<b>STOT-single exposure</b>	
<b>Chemical Name</b>	<b>STOT -single exposure- source information</b>
Benzothiazole	Based on the NITE GHS classification results.
<b>STOT-repeated exposure</b>	
<b>Chemical Name</b>	<b>STOT -repeated exposure- source information</b>
Benzothiazole	Based on the NITE GHS classification results.
<b>Aspiration hazard</b>	
<b>Chemical Name</b>	<b>Aspiration Hazard source information</b>
Benzothiazole	Based on the NITE GHS classification results.

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Benzothiazole 95-16-9	N/A	LC50 : Pimephales promelas 58.8 - 69.7 mg/L 96 h	N/A	EC50 : Daphnia magna 19 mg/L 48h

### Persistence and degradability

Degree of decomposition: 0 % by BOD

### Bioaccumulative potential

No information available

### Mobility

Chemical Name	Partition coefficient
Benzothiazole 95-16-9	2.01

### Mobility in soil

No information available

### Other Data

No information available

## 13. DISPOSAL CONSIDERATIONS

### Waste treatment methods

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Precautionary including method of Disposal** Disposal should be in accordance with applicable regional, national and local laws and

disposing contaminated packaging regulations.

## 14. TRANSPORT INFORMATION

### DOT

UN/ID No	UN1602
Proper shipping name:	Dye, liquid, toxic, n.o.s. (Benzothiazole)
UN classification	6.1
Subsidiary hazard class	
Packing group	II
Marine pollutant	Not applicable

### IATA

UN/ID No	UN1602
Proper shipping name:	Dye, liquid, toxic, n.o.s. (Benzothiazole)
UN classification	6.1
Subsidiary hazard class	
Packing group	II
Environmentally Hazardous Substance	Not applicable

### IMDG

UN/ID No	UN1602
Proper shipping name:	Dye, liquid, toxic, n.o.s. (Benzothiazole)
UN classification	6.1
Subsidiary hazard class	
Packing group	II
Marine pollutant (Sea)	Not applicable

## 15. REGULATORY INFORMATION

### US Federal Regulations

#### SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS RN	Weight-%	SARA 313 - Threshold Values %
Benzothiazole - 95-16-9	95-16-9	96.0	N/A

#### SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

#### CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

#### CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

### US State Regulations

**California Proposition 65**

This product does not contain any chemicals regulated by Proposition 65

**U.S. State Right-to-Know Regulations**

This product does not contain any substances regulated by state right-to-know regulations

**U.S. EPA Label Information**

EPA Pesticide Registration Number Not applicable

**16. OTHER INFORMATION**

**Issue Date** 16-Jun-2025

**Issue Date** 18-Jun-2025

**Revision Note**

No information available

**Disclaimer**

**The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.**

**End of Safety Data Sheet**