

# Safety Data Sheet

## Benzotriazole, Granular

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### 1. PRODUCT AND COMPANY IDENTIFICATION

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**Product Name:** Benzotriazole, Granular

**Synonyms/Generic Names:** 1H-Benzotriazole, 1,2,3-Benzotriazole, btaH

**Product Number:** 0818

**Product Use:** Industrial, Manufacturing or Laboratory use

**Manufacturer:** Columbus Chemical Industries, Inc.  
N4335 Temkin Rd.  
Columbus, WI. 53925

**For More Information:** 920-623-2140 (Monday-Friday 8:00-4:30)  
[www.columbuschemical.com](http://www.columbuschemical.com)

**In Case of Emergency Call:** CHEMTREC - 800-424-9300 or 703-527-3887 (24 Hours/Day, 7 Days/Week)

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### 2. HAZARDS IDENTIFICATION

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**Signal Words:** Warning

**Pictograms:**



**GHS Classification:**

Acute toxicity, Inhalation	Category 4
Acute toxicity, Oral	Category 4
Eye irritation	Category 2A
Acute aquatic toxicity	Category 3
Chronic aquatic toxicity	Category 3

**GHS Label Elements, including precautionary statements:**

**Hazard Statements:**

H302+H312	Harmful if swallowed or in contact with skin.
H319	Causes serious eye irritation.
H412	Harmful to aquatic life with long lasting effects.

**Precautionary Statements:**

P261	Avoid breathing dust/fume/gas/mist/vapors/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or in a well-ventilated area.

P273	Avoid release to the environment.
P280	Wear protective gloves/eye protection/face protection.
P301+P312	IF SWALLOWED: Call a POISON CENTER/doctor/physician if you feel unwell.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER/doctor/physician if you feel unwell.
P330	Rinse mouth.
P337+P313	If eye irritation persists: Get medical advice/attention.
P501	Dispose of contents/container in accordance with local regulations.

### Potential Health Effects

<b>Eyes</b>	Irritation, corrosive, can result in corneal damage or blindness
<b>Inhalation</b>	Irritation to gastro-intestinal or respiratory tract, characterized by burning, sneezing and coughing. Can produce lung damage, choking, unconsciousness or death.
<b>Skin</b>	Irritation, corrosive, inflammation and blistering.
<b>Ingestion</b>	Corrosive.

### NFPA Ratings

<b>Health</b>	2
<b>Flammability</b>	0
<b>Reactivity</b>	0
<b>Specific hazard</b>	Not Available

### HMIS Ratings

<b>Health</b>	2
<b>Fire</b>	0
<b>Reactivity</b>	0

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Component	Weight %	CAS #	EINECS# / ELINCS#	Formula	Molecular Weight
Benzotriazole (1,2,3)	>98.5	95-14-7	202-394-1	C <sub>6</sub> H <sub>4</sub> N <sub>3</sub> H	119.12 g/mol

## 4. FIRST-AID MEASURES

<b>Eyes</b>	Rinse with plenty of water for at least 15 minutes and seek medical attention immediately.
<b>Inhalation</b>	Move casualty to fresh air and keep at rest. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. Get medical attention.
<b>Skin</b>	Flush with plenty of water for at least 15 minutes while removing contaminated clothing and wash using soap. Get medical attention.
<b>Ingestion</b>	<b>Do Not Induce Vomiting!</b> Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. Get medical attention immediately.

## 5. FIREFIGHTING MEASURES

<b>Suitable (and unsuitable) extinguishing media</b>	Product is not flammable. Use appropriate media for adjacent fire. Cool unopened containers with water.
<b>Special protective equipment and precautions for firefighters</b>	Wear self-contained, approved breathing apparatus and full protective clothing, including eye protection and boots.
<b>Specific hazards arising from the chemical</b>	Emits toxic fumes under fire conditions. (Carbon oxides, Nitrogen oxides) (See also Stability and Reactivity section).

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## 6. ACCIDENTAL RELEASE MEASURES

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<b>Personal precautions, protective equipment and emergency procedures</b>	See section 8 for recommendations on the use of personal protective equipment.
<b>Environmental precautions</b>	Prevent spillage from entering drains. Any release to the environment may be subject to a federal/national or local reporting requirements.
<b>Methods and materials for containment and cleaning up</b>	Prevent spillage from entering drains. Pick up and arrange disposal without creating dust. Sweep up and shovel. Clean surfaces thoroughly with water to remove residual contamination. Dispose of all waste and cleanup materials in accordance with regulations.

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## 7. HANDLING AND STORAGE

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### Precautions for safe handling

See section 8 for recommendations on the use of personal protective equipment. Use with adequate ventilation. Wash thoroughly after using. Keep container closed when not in use.

### Conditions for safe storage, including any incompatibilities

Store in cool, dry well ventilated area. Protect against moisture and light. Maintain adequate ventilation. Keep away from incompatible materials (see section 10 for incompatibilities).

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## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

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**Occupational Exposure Controls:** Product contains no substances with exposure limits.

### Personal Protection

<b>Eyes</b>	Wear chemical safety glasses with a face shield for splash protection.
<b>Inhalation</b>	If necessary use an approved respirator with acid vapor cartridges. Provide local exhaust, preferably mechanical.
<b>Skin</b>	Wear neoprene or rubber gloves, apron and other protective clothing appropriate to the risk of exposure.
<b>Other</b>	Not Available

### Other Recommendations

Provide eyewash stations, quick-drench showers and washing facilities accessible to areas of use and handling. Have supplies and equipment for neutralization and running water available.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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Appearance (physical state, color, etc.)	White to off-white fine granular.
Odor	Slight odor
Odor threshold	Not Available
pH	6.0 - 7.0 at 100 g/L at 20 °C (68 °F)
Melting point/freezing point	97 - 99 °C (207 - 210 °F)
Initial boiling point and boiling range	Not Available
Flash point	170 °C (338 °F)
Evaporation rate	Not Available
Flammability (solid, gas)	Not Available
Upper/lower flammability or explosive limit	Not Available
Vapor pressure	Not Available

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Vapor density	Not Available
Relative density	Not Available
Solubility (ies)	Not Available
Partition coefficient: n-octanol/water	Not Available
Auto-ignition temperature	400 °C (752 °F)
Decomposition temperature	Not Available

## 10. STABILITY AND REACTIVITY

<b>Chemical Stability</b>	Stable
<b>Possibility of Hazardous Reactions</b>	Will not occur.
<b>Conditions to Avoid</b>	Heat
<b>Incompatible Materials</b>	Not Available
<b>Hazardous Decomposition Products</b>	Oxides of nitrogen and carbon.

## 11. TOXICOLOGICAL INFORMATION

### Acute Toxicity

#### Benzotriazole

<b>Skin</b>	LD50 Dermal – rat - > 1000 mg/kg
<b>Eyes</b>	Not Available
<b>Respiratory</b>	LC50 Inhalation – rat – 4 hours – 1400ppm
<b>Ingestion</b>	LD50 Oral – rat – 560 mg/kg

### Carcinogenicity

<b>IARC</b>	No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
<b>ACGIH</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
<b>NTP</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.
<b>OSHA</b>	No components of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Signs & Symptoms of Exposure

<b>Skin</b>	Contact causes irritation, inflammation, and blistering.
<b>Eyes</b>	Contact rapidly causes severe damage. Symptoms include eye burns and watering eyes irritation, itching, redness, staining, swelling of exposed tissues. Permanent damage to cornea may result.
<b>Respiratory</b>	Irritation especially to mucous membranes and upper respiratory tract
<b>Ingestion</b>	May cause gastrointestinal pain, diarrhea, nausea and vomiting

<b>Chronic Toxicity</b>	Carcinogenicity - Rat - Oral Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Brain and Coverings:Tumors. Carcinogenicity - Mouse - Oral Tumorigenic:Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration:Tumors. Lungs, Thorax, or Respiration:Bronchiogenic carcinoma.
<b>Teratogenicity</b>	Not Available
<b>Mutagenicity</b>	Rat Embryo Morphological transformation.
<b>Embryotoxicity</b>	Not Available
<b>Specific Target Organ Toxicity</b>	Not Available
<b>Reproductive Toxicity</b>	Not Available
<b>Respiratory/Skin Sensitization</b>	Not Available

## 12. ECOLOGICAL INFORMATION

### Ecotoxicity

#### *Benzotriazole*

<b>Aquatic Vertebrate</b>	LC50 – <i>Lepomis macrochirus</i> (Bluegill) – 25 mg/l – 96.0 hours
<b>Aquatic Invertebrate</b>	EC50 – <i>Daphnia magna</i> (Water flea) – 91 mg/l – 48 hours
<b>Terrestrial</b>	Not Available

<b>Persistence and Degradability</b>	Not readily biodegradable
<b>Bioaccumulative Potential</b>	Not Available
<b>Mobility in Soil</b>	Not Available
<b>PBT and vPvB Assessment</b>	Not Available
<b>Other Adverse Effects</b>	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

## 13. DISPOSAL CONSIDERATIONS

<b>Waste Product or Residues</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product or residue.
<b>Product Containers</b>	Users should review their operations in terms of the applicable federal/national or local regulations and consult with appropriate regulatory agencies if necessary before disposing of waste product container.

The information offered in section 13 is for the product as shipped. Use and/or alterations to the product may significantly change the characteristics of the material and alter the waste classification and proper disposal methods.

## 14. TRANSPORT INFORMATION

US DOT	Not Dangerous Goods
TDG	Not Dangerous Goods
IMDG	Not Dangerous Goods
Marine Pollutant	No
IATA/ICAO	Not Dangerous Goods

## 15. REGULATORY INFORMATION

TSCA Inventory Status	All ingredients are listed on the TSCA Active inventory.
DSL / NDSL	All ingredients are listed on the DSL inventory.
California Proposition 65	Not Listed
Rhode Island: Hazardous Substance List	Not Listed
Massachusetts: Toxic or Hazardous Substance List, Right to Know	Not Listed
Pennsylvania: Hazardous Substance List	Not Listed
New Jersey: Right to Know Hazardous Substance List	Not Listed
SARA 302	Not Listed
SARA 304	Not Listed

SARA 311	Acute Health Hazard.
SARA 312	Acute Health Hazard.
SARA 313	Not Listed
WHMIS Canada	Not Listed

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## 16. OTHER INFORMATION

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Revision	Date
Original	05/05/2015
Revision 1	09/27/2021

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