

# Safety Data Sheet

## 1,2,3-Benzotriazole

### SECTION 1 – PRODUCT AND SUPPLIER IDENTIFICATION

**Product:** 1,2,3-Benzotriazole  
**Supplier:** SingleTrack Solutions Corp  
**Address:** 4838 Richard Road SW, Calgary, Alberta, Canada T3E 6L1  
**Office:** 1-587-353-4119  
**Emergency (24hr):** 1-888-226-8832 (CANUTEC)

#### Product detail

Product Name : 1,2,3-Benzotriazole  
 Synonyms: BTA  
 CAS No.: 95-14-7

### SECTION 2 – HAZARD(S) IDENTIFICATION

#### Hazard description:

Xn Harmful

Information pertaining to dangers for man and environment:

- R 22** Harmful if swallowed.
- R 36** Irritating to eyes.
- R 52/53** Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Classification system:

The classification was made according to the latest editions of the EU-lists, and expanded using company data and specialized literature.

### SECTION 3 – COMPOSITION/INFORMATION ON INGREDIENTS

CAS No.	Description	EINECS No.
95-14-7	Benzotriazole	2023941

### SECTION 4 – FIRST-AID MEASURES

#### General information:

Symptoms of poisoning may occur even after several hours; therefore, medical observation is suggested for at least 48 hours after the accident.

Immediately remove any clothing soiled by the product.

#### After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness, place patients on their side in a stable position for transportation.

# Safety Data Sheet

**After skin contact:**

Wash with water and soap and rinse with plenty of water. If skin irritation continues, consult a doctor.

**After eye contact:**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**After swallowing:**

Rinse out mouth and then drink plenty of water. Seek medical treatment.

## SECTION 5 – FIRE-FIGHTING MEASURES

**Suitable extinguishing agents:**

CO<sub>2</sub>, extinguishing powder, or water spray. Fight larger fires with water spray or alcohol resistant foam. Use fire fighting measures that suit the environment.

**Special hazards caused by the material, its products of combustion or resulting gases:**

Formation of toxic gases is possible during heating or in case of fire. Persons, who have inhaled burning vapours must be observed by medicals for at least 48 hours. Symptoms of poisoning may even occur several hours after the accident.

**Protective equipment:**

Wear self-contained respiratory protective device. Do not inhale combustion vapors.

**Additional information:**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**Person-related safety precautions:**

Ensure adequate ventilation. Avoid formation of dust.

Wear protective equipment. Keep unprotected persons away.

Do not smoke - keep ignition sources away.

**Measures for environmental protection:**

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to penetrate the ground/soil.

In case of seepage into the ground inform responsible authorities.

Keep contaminated washing water and dispose of appropriately.

**Measures for cleaning/collecting:**

Ensure adequate ventilation.

Avoid dust formation absolutely. If necessary, pick up with a tested and approved industrial vacuum cleaner.

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to Section 13.

**SECTION 7 – HANDLING AND STORAGE****Handling****Information for safe handling:**

Ensure good ventilation/exhaustion at the workplace.

Prevent formation of dust.

Any deposit of dust which cannot be avoided must be regularly removed.

**Information about protection against explosions and fires:**

Dust can combine with air to form an explosive mixture.

Keep ignition sources away - Do not smoke.

Protect against electrostatic charges

**Storage****Requirements to be met by storerooms and receptacles:**

Store container tightly sealed at a cool and dry place with sufficient ventilation.

**Information about storage in one common storage facility:**

Store away from foodstuffs.

**Further information about storage conditions:**

Keep receptacle tightly sealed.

**Storage class**

11 Flammable solids

**SECTION 8 – EXPOSURE CONTROLS/PERSONAL PROTECTION****Additional information about design of technical systems:**

Install appropriate mechanical ventilation.

Keep away from open flames and other ignition sources.

Protect against electrostatic charges.

**Components with limit values that require monitoring at the workplace:**

Not required.

**Additional Occupational Exposure Limit Values for possible hazards during processing:**

Observe general threshold limit for dust.

**Additional information:**

The lists that were valid during the creation were used as basis.

**Personal protective equipment****General protective and hygienic measures:**

Keep away from foodstuffs, beverages, and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

Do not inhale dust / smoke / mist.

Vacuum clean contaminated clothing. Do not blow or brush off contamination.

**Breathing equipment:****Short term filter device:**

Filter P2.

**Protection of hands:**

Protective gloves.

The glove material must be impermeable and resistant to the product/the substance/ the preparation.

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

**Material of gloves:**

Rubber gloves.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

**Penetration time of glove material:**

The exact break-through time must be found out by the manufacturer of the protective gloves and has to be observed.

**Eye protection:**

Tightly sealed goggles.

**Body protection:**

Protective work clothing.

**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES****General Information**

**Form:** Powder, granular, needle

**Colour:** White

**Odour:** Nearly odourless

**Change in Condition:**

**Purity:** 99.8% min.

**Chroma:** 40 max.

**Moisture:** 0.04 max.

**Melting Point:** 97°C min.

**Ash Content:** 0.03% max.

**Boiling Point/Boiling Range:** 204/220mbar°C

**Flash Point:** 195°C

**Flammability:** Product is not flammable

**Ignition Temperature:** 400°C

**Danger of Explosion:** Product is not explosive. However, formation of explosive air/dust mixtures is possible.

**Density:** 1.6 g/cm<sup>3</sup> (@ 20°C)

**Solubility in / Miscibility with Water:** 20g/L (@ 20°C)

**pH-value:** 5 – 6

**SECTION 10 – STABILITY AND REACTIVITY****Thermal decomposition / conditions to be avoided:**

No decomposition if used and stored according to specifications.

**Materials to be avoided:**

Strong oxidants

**Dangerous reactions:**

No dangerous reactions known

**Dangerous products of decomposition:**

Hydrogen cyanide (prussic acid)

Nitrogen oxides (NOx)

Carbon monoxide and carbon dioxide

**SECTION 11 – TOXICOLOGICAL INFORMATION****Acute toxicity:****LD/LC50 values that are relevant for classification:**

95-14-7 benzotriazole

**Oral:** LD50: 965 mg/kg (rat)

**Dermal:** LD50: >2000 mg/kg (rabbit)

**Primary irritant effect:****on the skin:**

No irritation, but slight irritation or redness is possible after long or repeatedly mechanical contact.

**on the eye:**

Strong irritating effect.

**Sensitization:**

No sensitizing effects known.

**SECTION 12 – ECOLOGICAL INFORMATION****Ecotoxicological effects:****Aquatic toxicity:**

**95-14-7 benzotriazole**

**EC50:** 1060 mg/L (ba)

**IC50/72h:** 231 mg/L (scenedesmus subspicatus)

**LC50/48h:** 91 mg/L (daphnia magna)

**LC50/96h:** 39 mg/L (fish)

**LC50/96h:** 25 mg/L (lm)

**General notes:**

Water hazard class 2 (German Regulation) (Assessment by list): hazardous for water.

According to appendix 3 of VwVwS dated 17.05.1999 (German regulation)

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

## SECTION 13 – DISPOSAL CONSIDERATIONS

### Product Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

### Uncleaned packaging Recommendation:

Disposal must be made according to official regulations.

## SECTION 14 – TRANSPORTATION INFORMATION

### Land transport ADR/RID (cross-border) class:

No hazardous good according to the regulation.

### Maritime transport IMDG Class:

No hazardous good according to the regulation.

### Air transport ICAO-TI and IATA-DGR Class:

No hazardous good according to the regulation.

## SECTION 15 – REGULATORY INFORMATION

### Canadian Regulations:

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no) *
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product are listed on the inventory administered by the governing country(s) or are exempt.

A "No" indicates that one or more components of the product are not listed on the inventory administered by the governing country(s)

## SECTION 16 – OTHER INFORMATION

SingleTrack Solutions provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the material by a properly trained person using this product. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

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