

MATERIAL SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

MSDS Name: 1H-Benzotriazole

Synonyms: 1,2,3-Benzotriazole; Cobratec 99; 1,2,3-triaza-1H-indene;

1,2,3-triazaindene;

1,2-aminoazophenylene; 1H-benzotriazole; 2,3-diazaindole; Azimidobenzene;

aziminobenzene;

benzene azimide; Benzisotriazole; Benzotriazole; cobratec #99; U-6233; BTA;

Catalog Numbers: CS321

Company Identification :

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2. COMPOSITION, INFORMATION ON INGREDIENTS

CAS#	Chemical Name	%	EINECS#
95-14-7	1H-Benzotriazole	99.5	202-394-1

Hazard Symbols: Xn

Risk Phrases: 20/22 36 52/53

3. HAZARDS IDENTIFICATION

Emergency Overview

Harmful in contact with skin and if swallowed. Toxic by inhalation. Irritating to eyes, respiratory system and skin.

Potential Health Effects

Eye: Causes eye irritation. May cause redness, pain, blurred vision and possible eye damage.

Skin: Causes skin irritation. Harmful if absorbed through the skin. Causes redness and pain.

Ingestion: Harmful if swallowed. May cause irritation of the digestive tract. May cause

central nervous system effects. May cause headache, nausea, fatigue, and dizziness.

Inhalation: Causes respiratory tract irritation. Toxic if inhaled. May cause headache.

Chronic: Not available.

4. FIRST AID MEASURES

Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the

upper and lower eyelids. Get medical aid immediately.

Skin: Get medical aid immediately. Immediately flush skin with plenty of soap and water for at least 15 minutes while removing contaminated clothing and shoes.

Ingestion: Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

Inhalation: Get medical aid immediately. Remove from exposure to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

Notes to Physician: Treat symptomatically and supportively.

5. FIRE FIGHTING MEASURES

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

Extinguishing Media: Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or chemical foam.

6. ACCIDENTAL RELEASE MEASURES

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks: Sweep up, then place into a suitable container for disposal.

7. HANDLING and STORAGE

Handling: Do not breathe dust, vapor, mist, or gas. Do not get in eyes, on skin, or on clothing. Use only in a chemical fume hood.

Storage: Store in a cool, dry place. Store in a tightly closed container. Corrosives area.

8. EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Controls: Use adequate ventilation to keep airborne concentrations low.

Personal Protective Equipment

Eyes: Wear chemical goggles.

Skin: Wear appropriate protective gloves and clothing to prevent skin exposure.

Clothing: Wear appropriate protective clothing to minimize contact with skin.

Respirators: Wear a NIOSH/MSHA or European Standard EN 149 approved full-facepiece airline respirator in the positive pressure mode with emergency escape provisions.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Flakes
Appearance: yellow - beige
Odor: odorless
pH: 5 (25 g/l aq.sol.)
Vapor Pressure: 0.04 mm Hg, 20 deg C
Viscosity dl/g 30 deg.C: 38
Boiling Point: 204 deg C, 15 mmHg
Freezing/Melting Point: 94 - 99 deg C
Autoignition Temperature: 210 deg C (410.00 deg F)
Flash Point: 170 deg C (338.00 deg F)
Explosion Limits, lower: 2.4 Vol%
Explosion Limits, upper: Not available.
Decomposition Temperature: > 160 deg C
Solubility in water: 25 g/l in water (20 C)
Specific Gravity/Density: 1.44 g/cm³, 20 deg C
Molecular Formula: C₆H₅N₃
Molecular Weight: 119.13

10. STABILITY AND REACTIVITY

Chemical Stability: Dusts may form an explosion hazard.

Conditions to Avoid: Incompatible materials, heat.

Incompatibilities with Other Materials: Strong oxidizing agents, heavy metals.

Hazardous Decomposition Products: Nitrogen oxides, carbon monoxide, carbon dioxide.

Hazardous Polymerization: Has not been reported.

11. TOXICOLOGICAL INFORMATION

RTECS#: DM1225000

LD50/LC50:

Inhalation, rat: LC50 = 1910 mg/m³/3H;

Oral, mouse: LD50 = 615 mg/kg;

Oral, rat: LD50 = 560 mg/kg;

Dermal, rabbit: LD50 > 2000 mg/kg.

Carcinogenicity:

Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA. See actual entry in RTECS for complete

information.

12. ECOLOGICAL INFORMATION

Non-biodegradable. Avoid entering into waters or underground water. Do not empty into drains.

13. DISPOSAL CONSIDERATIONS

Dispose of in a manner consistent with federal, state, and local regulations.

14. TRANSPORT INFORMATION

IATA

Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.*

Hazard Class: 6.1

UN Number: 2811

Packing Group: III

IMO

Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: 2811

Packing Group: III

RID/ADR

Shipping Name: TOXIC SOLID, ORGANIC, N.O.S.

Hazard Class: 6.1

UN Number: 2811

Packing Group: III

15. REGULATORY INFORMATION

European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: Xn

Risk Phrases:

R 20/22 Harmful by inhalation and if swallowed.

R 36 Irritating to eyes.

R 52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Safety Phrases:

22 Do not breathe dust.

24 Avoid contact with skin.

26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

36/39 Wear suitable protective clothing and eye/face protection.

60 This material and its container must be disposed of as hazardous waste.

WGK (Water Danger/Protection): 2

US FEDERAL

TSCA: CAS# 95-14-7 is listed on the TSCA inventory.

16. ADDITIONAL INFORMATION

Date Issued: 05/20/2003

Revision No: 1

Date Revised: 05/20/2003

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