

MATERIAL SAFETY DATA SHEET  
1H-Benzotriazole

Section 1 - Chemical Product and Company Identification

<b>MSDS Name:</b>	1H-Benzotriazole
<b>Catalog Numbers:</b>	10567-0000, 10567-1000, 10567-5000, 18388-0000, 18388-1000, 18388-5000
<b>Synonyms:</b>	1,2,3-Benzotriazole
<b>Company Identification:</b>	Acros Organics BVBA Janssen Pharmaceuticaaan 3a 2440 Geel, Belgium
<b>Company Identification: (USA)</b>	Acros Organics One Reagent Lane Fair Lawn, NJ 07410
<b>For information in the US, call:</b>	800-ACROS-01
<b>For information in Europe, call:</b>	+32 14 57 52 11
<b>Emergency Number, Europe:</b>	+32 14 57 52 99
<b>Emergency Number US:</b>	201-796-7100
<b>CHEMTREC Phone Number, US:</b>	800-424-9300
<b>CHEMTREC Phone Number, Europe:</b>	703-527-3887

Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name:	%	EINECS#
95-14-7	1H-Benzotriazole	>98%	202-394-1

**Hazard Symbols:** XN F



**Risk Phrases:** 11 20/21/22 36/37/38 5

Section 3 - Hazards Identification

**EMERGENCY OVERVIEW**

*Highly flammable. Harmful by inhalation, in contact with skin and if swallowed. Irritating to eyes, respiratory system and skin. Heating may cause an explosion.*

**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:** Harmful if inhaled. Causes respiratory tract irritation. May cause headache.
- Chronic:**

## Section 4 - First Aid Measures

<b>Eyes:</b>	Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
<b>Skin:</b>	Get medical aid. Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.
<b>Ingestion:</b>	Get medical aid immediately. Wash mouth out with water.
<b>Inhalation:</b>	Get medical aid immediately. Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.
<b>Notes to Physician:</b>	Treat symptomatically and supportively.

## Section 5 - Fire Fighting Measures

<b>General Information:</b>	As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion. Will burn if involved in a fire. Dust can be an explosion hazard when exposed to heat or flame. This material in sufficient quantity and reduced particle size is capable of creating a dust explosion. Flammable solid. May decompose explosively when heated or involved in a fire. Containers may explode if exposed to fire. May explode on distillation.
<b>Extinguishing Media:</b>	Use water spray to cool fire-exposed containers. Use water spray, dry chemical, carbon dioxide, or chemical foam.

## Section 6 - Accidental Release Measures

<b>General Information:</b>	Use proper personal protective equipment as indicated in Section 8.
<b>Spills/Leaks:</b>	Vacuum or sweep up material and place into a suitable disposal container. Do not flush into a sewer. Remove all sources of ignition. Use a spark-proof tool.

## Section 7 - Handling and Storage

<b>Handling:</b>	Use spark-proof tools and explosion proof equipment. 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.
<b>Storage:</b>	Keep away from sources of ignition. Store in a cool, dry place. Store in a tightly closed container. Flammables-area.

## Section 8 - Exposure Controls, Personal Protection

### Engineering Controls:

Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate general or local explosion-proof ventilation to keep airborne levels to acceptable levels.

### Exposure Limits

CAS# 95-14-7:

### Personal Protective Equipment

<b>Eyes:</b>	Wear chemical splash goggles.
<b>Skin:</b>	Wear appropriate protective gloves to prevent skin exposure.
<b>Clothing:</b>	Wear appropriate protective clothing to prevent skin exposure.
<b>Respirators:</b>	Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid  
**Color:** white to yellow-beige  
**Odor:** odorless  
**pH:** 5 (25 g/l aq.sol.)  
**Vapor Pressure:** 0.04mmHg @20 deg C  
**Viscosity:** Not available  
**Boiling Point:** 204 deg C @15mmHg ( 399.20°F)  
**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:**  
**Solubility in water:** 25 g/l (20°C)  
**Specific Gravity/Density:**  
**Molecular Formula:** C6H5N3  
**Molecular Weight:** 119.13

#### Section 10 - Stability and Reactivity

**Chemical Stability:** Heating may cause an explosion. Dusts may form an explosion hazard.  
**Conditions to Avoid:** Incompatible materials, ignition sources, 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.

#### Section 11 - Toxicological Information

**RTECS#:** CAS# 95-14-7: DM1225000  
**LD50/LC50:** RTECS:  
**CAS# 95-14-7:** Inhalation, rat: LC50 = 1910 mg/m<sup>3</sup>/3H;  
Oral, mouse: LD50 = 615 mg/kg;  
Oral, rat: LD50 = 560 mg/kg;  
Skin, rat: LD50 = >1 gm/kg;  
Other:  
**Carcinogenicity:** 1H-Benzotriazole - Not listed as a carcinogen by ACGIH, IARC, NTP, or CA Prop 65.  
**Other:** See actual entry in RTECS for complete information. The toxicological properties have not been fully investigated.

#### Section 12 - Ecological Information

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

#### Section 13 - Disposal Considerations

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

#### Section 14 - Transport Information

IATA

IMO

RID/ADR

<b>Shipping Name:</b>	FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.*	FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.	FLAMMABLE SOLID, TOXIC, ORGANIC, N.O.S.
<b>Hazard Class:</b>	4.1 (6.1)	4.1 (6.1)	4.1 (6.1)
<b>UN Number:</b>	2926	2926	2926
<b>Packing Group:</b>	II	II	II

## Section 15 - Regulatory Information

### European/International Regulations

European Labeling in Accordance with EC Directives

Hazard Symbols: XN F

Risk Phrases:

R 11 Highly flammable.

R 20/21/22 Harmful by inhalation, in contact with skin and if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

R 5 Heating may cause an explosion.

Safety Phrases:

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

S 28A After contact with skin, wash immediately with plenty of water.

S 36/37/39 Wear suitable protective clothing, gloves and eye/face protection.

S 45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

WGK (Water Danger/Protection)

CAS# 95-14-7: 2

Canada

CAS# 95-14-7 is listed on Canada's DSL List

### US Federal

TSCA

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

## Section 16 - Other Information

**MSDS Creation Date:** 3/17/1997

**Revision #6 Date** 5/04/2004

**Revisions were made in Sections:** General revision.

*The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential, or exemplary damages howsoever arising, even if the company has been advised of the possibility of such damages.*

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