

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

**SECTION 1. IDENTIFICATION**

Product name : 1H-Benzotriazole

Number : 000000021039

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.  
1953 South Harvey Street  
Muskegon, MI 49442

For more information call : 1-800-368-0050  
+1-231-726-3171(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : **Medical: 1-800-498-5701 or +1-303-389-1414**  
: **Transportation (CHEMTREC): 1-800-424-9300 or**  
: **+1-703-527-3887**  
:  
: (24 hours/day, 7 days/week)

**SECTION 2. HAZARDS IDENTIFICATION****Emergency Overview**

Form : solid

Color : colourless to yellowish

Odor : odourless

**Classification of the substance or mixture**

Classification of the substance or mixture : Combustible dust  
Acute toxicity, Category 4, Oral  
Eye irritation, Category 2A

**GHS Label elements, including precautionary statements**

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

Symbol(s)

:



Signal word

: Warning

Hazard statements

: May form combustible dust concentrations in air.  
Harmful if swallowed.  
Causes serious eye irritation.

Precautionary statements

: **Prevention:**  
Wash skin thoroughly after handling.  
Do not eat, drink or smoke when using this product.  
Avoid release to the environment.  
Wear protective gloves/protective clothing/eye protection/face protection.

**Response:**  
IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.  
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.

**Disposal:**  
Dispose of contents/ container to an approved waste disposal plant.

**Carcinogenicity**

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP, IARC, or OSHA.

**SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Formula

: C<sub>6</sub>H<sub>5</sub>N<sub>3</sub>

Chemical nature

: Substance

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

| Chemical name       | CAS-No. | Concentration |
|---------------------|---------|---------------|
| 1,2,3-Benzotriazole | 95-14-7 | 100.00 %      |

**SECTION 4. FIRST AID MEASURES**

- General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.
- Inhalation : Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Use oxygen as required, provided a qualified operator is present. Call a physician.
- Skin contact : Wash off immediately with plenty of water for at least 15 minutes. Take off contaminated clothing and shoes immediately. Wash contaminated clothing before re-use. Call a physician if irritation develops or persists.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Protect unharmed eye. Call a physician if irritation develops or persists.
- Ingestion : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. If victim is fully conscious, give a cupful of water. Call a physician.

**SECTION 5. FIREFIGHTING MEASURES**

- Suitable extinguishing media : Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder
- Specific hazards during firefighting : Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.  
In case of fire hazardous decomposition products may be produced such as:  
carbon oxides (CO, CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>).

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

Special protective equipment for firefighters : Wear self-contained breathing apparatus and protective suit.

Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protective equipment and emergency procedures : Wear personal protective equipment. Unprotected persons must be kept away.  
Ensure adequate ventilation.  
Avoid dust formation.  
Avoid breathing dust.  
Avoid contact with skin, eyes and clothing.  
May form explosive dust-air mixture.  
Accumulations of dust from this product in the workplace may increase the likelihood or severity of an explosion.

Environmental precautions : Prevent further leakage or spillage if safe to do so.  
Discharge into the environment must be avoided.  
Do not flush into surface water or sanitary sewer system.  
Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up : Ventilate the area.  
Avoid dust formation and electrical charging (sparking) because dust explosion might occur.  
Use only non-sparking tools.  
Take up mechanically and collect in suitable container for disposal.  
Dispose of in accordance with local regulations.

**SECTION 7. HANDLING AND STORAGE****Handling**

Precautions for safe handling : Wear personal protective equipment.  
Use only in well-ventilated areas.  
Avoid inhalation, ingestion and contact with skin and eyes.  
Take precautionary measures against static discharges.  
Static charges on powders or powders in liquids may ignite

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

combustible atmospheres.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

**Storage**

Conditions for safe storage, including any incompatibilities : Store in original container.  
Keep containers tightly closed in a dry, cool and well-ventilated place.

**SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.  
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.  
Avoid breathing dust.  
Avoid contact with skin, eyes and clothing.

Engineering measures : Provide exhaust ventilation if dust is formed.  
Use only in an area equipped with explosion proof exhaust ventilation.

Eye protection : Safety glasses with side-shields

Hand protection : Latex gloves  
Gloves must be inspected prior to use.  
Replace when worn.

Skin and body protection : Wear suitable protective equipment.  
Wear as appropriate:  
Dust impervious protective suit

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Hygiene measures : When using do not eat, drink or smoke.  
Wash hands before breaks and immediately after handling the product.  
Keep working clothes separately.  
Remove and wash contaminated clothing before re-use.

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

**Exposure Guidelines**

Contains no substances with occupational exposure limit values.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

|                             |                                                    |
|-----------------------------|----------------------------------------------------|
| Physical state              | : solid                                            |
| Color                       | : colourless to yellowish                          |
| Odor                        | : odourless                                        |
| Odor threshold              | : Note: No data available                          |
| pH                          | : Note: Not applicable                             |
| Melting point/range         | : 95 - 99 °C                                       |
| Boiling point/boiling range | : Note: Not applicable                             |
| Flash point                 | : Note: Not applicable                             |
| Evaporation rate            | : Note: No data available                          |
| Flammability                | : May form combustible dust concentrations in air. |
| Lower explosion limit       | : Note: No data available                          |
| Upper explosion limit       | : Note: No data available                          |
| Vapor pressure              | : 0.05 hPa<br>at 20 °C(68 °F)                      |
| Vapor density               | : Note: No data available                          |
| Density                     | : Note: No data available                          |

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

|                                           |                                               |
|-------------------------------------------|-----------------------------------------------|
| Water solubility                          | : Note: No data available                     |
| Partition coefficient:<br>n-octanol/water | : log Pow: 1.44                               |
| Ignition temperature                      | : Note: No data available                     |
| Decomposition temperature                 | : Note: No decomposition if used as directed. |
| Viscosity, dynamic                        | : Note: Not applicable                        |
| Viscosity, kinematic                      | : Note: Not applicable                        |
| Molecular weight                          | : 119.12 g/mol                                |

**SECTION 10. STABILITY AND REACTIVITY**

|                                    |                                                                                                                                                             |
|------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reactivity                         | : Not classified as a reactivity hazard.                                                                                                                    |
| Chemical stability                 | : Stable under recommended storage conditions.                                                                                                              |
| Possibility of hazardous reactions | : Hazardous polymerisation does not occur.                                                                                                                  |
| Conditions to avoid                | : Avoid dust formation and electrical charging (sparking) because dust explosion might occur.<br>Keep away from heat and sources of ignition.               |
| Incompatible materials             | : Strong oxidizing agents                                                                                                                                   |
| Hazardous decomposition products   | : In case of fire hazardous decomposition products may be produced such as:<br>carbon oxides (CO, CO <sub>2</sub> ) and nitrogen oxides (NO <sub>x</sub> ). |

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

**SECTION 11. TOXICOLOGICAL INFORMATION**

|                           |                                                                                     |
|---------------------------|-------------------------------------------------------------------------------------|
| Acute oral toxicity       | : LD50 Oral: ca. 500 mg/kg<br>Species: Rat<br>Method: OECD 423                      |
| Acute inhalation toxicity | : Note: No data available                                                           |
| Acute dermal toxicity     | : LD50: > 2,000 mg/kg<br>Species: Rabbit<br>Method: OECD Test Guideline 402         |
| Skin irritation           | : Species: Rabbit<br>Result: No skin irritation<br>Method: OECD Test Guideline 404  |
| Eye irritation            | : Species: Rabbit<br>Result: Irritating to eyes.<br>Method: OECD Test Guideline 405 |
| Sensitisation             | : Species: Guinea pig<br>Result: non-sensitizing                                    |

**SECTION 12. ECOLOGICAL INFORMATION****Ecotoxicity effects**

|                  |                                                                                                |
|------------------|------------------------------------------------------------------------------------------------|
| Toxicity to fish | : Note: Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data) |
|------------------|------------------------------------------------------------------------------------------------|

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

Toxicity to daphnia and other aquatic invertebrates : Note: Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

Toxicity to algae : Note: Conclusive and supporting classification (Ref: REACH Dossier - ECHA disseminated data)

**Elimination information (persistence and degradability)**

Biodegradability : Result: Not readily biodegradable.

**Further information on ecology****Ecotoxicology Assessment**

Results of PBT assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Additional ecological information : Toxic to aquatic life with long lasting effects.

**SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

**SECTION 14. TRANSPORT INFORMATION**

|            |                      |                                                                       |
|------------|----------------------|-----------------------------------------------------------------------|
| <b>DOT</b> | UN/ID No.            | : UN 3077                                                             |
|            | Proper shipping name | : Environmentally hazardous substances, solid, n.o.s. (Benzotriazole) |
|            | Class                | 9                                                                     |
|            | Packing group        | III                                                                   |
|            | Hazard Labels        | 9                                                                     |

|             |                          |                                                       |
|-------------|--------------------------|-------------------------------------------------------|
| <b>IATA</b> | UN/ID No.                | : UN 3077                                             |
|             | Description of the goods | : Environmentally hazardous substances, solid, n.o.s. |

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

|             |                                          |                                                                          |
|-------------|------------------------------------------|--------------------------------------------------------------------------|
|             |                                          | (Benzotriazole)                                                          |
|             | Class                                    | : 9                                                                      |
|             | Packaging group                          | : III                                                                    |
|             | Hazard Labels                            | : 9                                                                      |
|             | Packing instruction (cargo aircraft)     | : 956                                                                    |
|             | Packing instruction (passenger aircraft) | : 956                                                                    |
|             | Packing instruction (passenger aircraft) | : Y956                                                                   |
| <b>IMDG</b> | UN/ID No.                                | : UN 3077                                                                |
|             | Description of the goods                 | : Environmentally hazardous substances, solid, n.o.s.<br>(BENZOTRIAZOLE) |
|             | Class                                    | : 9                                                                      |
|             | Packaging group                          | : III                                                                    |
|             | Hazard Labels                            | : 9                                                                      |
|             | EmS Number                               | : F-A, S-F                                                               |
|             | Marine pollutant                         | : yes                                                                    |

Not regulated for transport when single and combination packagings are ≤ 5L for liquids or ≤ 5kg for solids per ADR SP 375, IMDG 2.10.2.7 and IATA SP A197.

**SECTION 15. REGULATORY INFORMATION****Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended : On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL) : All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

Korea. Existing Chemicals Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS) : On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC) : On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand : On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI) : On the inventory, or in compliance with the inventory

**National regulatory information**

**SARA 302 Components** : No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components** : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard

**California Prop. 65** : This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**Massachusetts RTK** : 1,2,3-Benzotriazole 95-14-7

**1H-Benzotriazole****12798-100G**

Version 1.3

Revision Date 09/29/2023

Print Date 09/30/2023

**SECTION 16. OTHER INFORMATION**

|                 | <b>HMIS III</b> | <b>NFPA</b> |
|-----------------|-----------------|-------------|
| Health hazard   | : 2*            | 2           |
| Flammability    | : 3             | 3           |
| Physical Hazard | : 1             |             |
| Instability     | :               | 1           |

\* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

**Further information**

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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous versions.

Previous Issue Date: 11/04/2019

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group