

Hyacinth BMT Crystal (5-Benzylmercaptotetrazole)

Safety Data Sheet

according to the REACH Regulation (EC) 1907/2006 amended by Regulation (EU) 2020/878

Issue date: 2/5/2014 Revision date: 6/27/2023

Supersedes version of: 2/24/2021 Version: 4.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form	: Substance
Trade name	: Hyacinth BMT Crystal (5-Benzylmercaptotetrazole)
EC-No.	: 606-853-0
CAS-No.	: 21871-47-6
Product code	: NC-0101
Type of product	: Synthesis Reagent
Formula	: C ₈ H ₈ N ₄ S
Synonyms	: 5-Benzylthiotetrazole, BTT, 5-Benzylmercaptotetrazole, BMT
Product group	: End product

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Main use category	: Industrial use, Laboratory chemical
Industrial/Professional use spec	: Industrial For professional use only
Use of the substance/mixture	: Laboratory chemicals Substance manufacture
Function or use category	: Laboratory chemicals

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer

emp Biotech GmbH
Robert-Rössle-Str. 10
13125 Berlin - Deutschland
T +49 (0)30 94 89 22 01 (Monday-Friday, 9:00 am-5:00 pm) - F +49 (0)30 94 89 32 01
info@empbiotech.com - www.empbiotech.com

1.4. Emergency telephone number

Emergency number	: Giftnotruf Berlin +49 30 30686700 (Beratung in Deutsch), 24 Stunden, 7 Tage/Woche; International: INFOTRAC +1-352-323-3500 (Phone) or in the US 800-535-5053 (toll-free), 24 hours/day, 7 days/week
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SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2	H315
Eye Dam. 1	H318
STOT SE 3	H335

Full text of hazard classes, H- and EUH-statements: see section 16

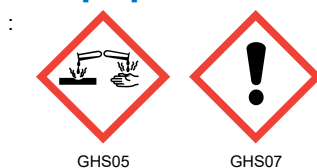
Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP)



GHS05

GHS07

Signal word (CLP) : Danger

Hazard statements (CLP) : H315 - Causes skin irritation.

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Precautionary statements (CLP) : H318 - Causes serious eye damage.
H335 - May cause respiratory irritation.
: P261 - Avoid breathing dust, mist.
P280 - Wear protective gloves, protective clothing, eye protection, face protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Labelling according to Directive 67/548/EEC or 1999/45/EC

2.3. Other hazards

Other hazards which do not result in classification : This substance / mixture does not contain any components of 0.1% or higher that are either classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type : Mono-constituent

Name	Product identifier	%
Hyacinth BMT Crystal (5-Benzylmercaptotetrazole)	(CAS-No.) 21871-47-6 (EC-No.) 606-853-0	≤ 100

Full text of H-statements: see section 16

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Consult a doctor. Show this safety data sheet to the doctor in attendance.
First-aid measures after inhalation : Move person to fresh air and ensure comfortable breathing. Give oxygen or artificial respiration if necessary. Call a doctor.
First-aid measures after skin contact : Gently wash with plenty of soap and water. Get medical advice/attention.
First-aid measures after eye contact : In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. Remove contact lenses, if possible. Continue rinsing.
First-aid measures after ingestion : Do not give an unconscious person anything to drink. Rinse mouth out with water. If swallowed, seek medical advice immediately and show this container or label.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/effects : The most important known symptoms and effects are described on the label (see 2.2) and / or in section 11.
Symptoms/effects after inhalation : May cause respiratory irritation.
Symptoms/effects after skin contact : Causes skin irritation.
Symptoms/effects after eye contact : Causes serious eye damage.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media : Dry chemical. Water spray. Carbon dioxide (CO₂). Dry sand. Alcohol-resistant foam.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire : Products of decomposition can be formed in case of fire:
Carbon oxides
Nitrogen oxides (NO_x)
Sulfur oxides
In the event of fire: see section 5. Toxic fumes may be released.

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5.3. Advice for firefighters

- Firefighting instructions : Remove container from danger zone and cool with water. Suppress (knock down) gases/vapors/mists with a water spray jet. Prevent fire extinguishing water from contaminating surface water or the ground water system.
- Protection during firefighting : Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

- Protective equipment : For personal protection see section 8. EN 166. EN 374. EN 143.
- Emergency procedures : Avoid creating or spreading dust. Avoid contact with skin and eyes. Avoid breathing dust, mist, gas. Ensure adequate ventilation, observe emergency procedures, consult an expert. Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Wear recommended personal protective equipment.
- Emergency procedures : Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Pick up and arrange disposal without creating dust.
- Methods for cleaning up : Shovel or sweep up and put in a closed container for disposal.

6.4. Reference to other sections

Information on exposure controls/personal protective equipment and on Instructions for disposal can be found in sections 8 and 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide adequate ventilation to minimize dust and/or vapour concentrations. For precautions see section 2.2.
- Hygiene measures : Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep container tightly closed in a dry, well-ventilated place. Keep away from heat and sources of ignition.
- Storage temperature : ≤ 35 °C
- Storage area : Storage class (TRGS 510): See section 15.1.2.

7.3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Hyacinth BMT Crystal (5-Benzylmercaptotetrazole) (21871-47-6)

Germany	Contains no substances with occupational exposure limits
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8.2. Exposure controls

Appropriate engineering controls:

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Hand protection:

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Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact-material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Splash contact-material: Nitrile rubber

Minimum layer thickness: 0,11 mm

Break through time: 480 min

Eye protection:

Wear closed safety glasses. EN 166. Face shield. Use face shield for larger quantities.

Skin and body protection:

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace. acid-resistant protective clothing

Respiratory protection:

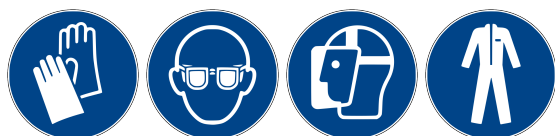
Required when dusts are generated.

Our recommendations on filtering respiratory protection are based on the following standards:

DIN EN 143, DIN 14387 and other accompanying standards relating to the used respiratory protection system.

Recommended Filter type: Filter type P1.

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.



Environmental exposure controls:

Do not let product enter drains.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Crystals.
Molecular mass	: 192.24 g/mol
Colour	: White.
Odour	: No data available
Odour threshold	: No data available
pH	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: 135 – 138 °C
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Water: Insoluble in water
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

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Explosive limits : No data available

9.2. Other information

SECTION 10: Stability and reactivity

10.1. Reactivity

No additional information available

10.2. Chemical stability

Stable under the specified storage conditions.

10.3. Possibility of hazardous reactions

No additional information available

10.4. Conditions to avoid

No additional information available

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Products of decomposition can be formed in case of fire:

Carbon oxides

Nitrogen oxides (NO_x)

Sulfur oxides

In the event of fire: see section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes skin irritation.

Serious eye damage/irritation : Causes serious eye damage.

Respiratory or skin sensitisation : Not classified

Germ cell mutagenicity : Not classified

Carcinogenicity : Not classified

Reproductive toxicity : Not classified

STOT-single exposure : Inhalation: May cause respiratory irritation.
- Respiratory system

STOT-repeated exposure : Not classified

Aspiration hazard : Not classified

Other information : To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

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12.5. Results of PBT and vPvB assessment

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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.
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12.6. Other adverse effects

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : End residual amounts and non-recyclable solutions to a recognized waste disposal company. These products must be dissolved in or mixed with a flammable solvent and burned in a chemical incinerator (with afterburner and exhaust air scrubber). Product residues must be disposed of in accordance with the waste directive 2008/98 / EC and national and regional regulations. Leave chemicals in original containers. Do not mix with other waste. Uncleaned containers are to be treated appropriately for the product.

SECTION 14: Transport information

In accordance with ADR / IMDG / IATA

ADR	IMDG	IATA
14.1. UN number		
Not applicable	Not applicable	Not applicable
14.2. UN proper shipping name		
Not applicable	Not applicable	Not applicable
14.3. Transport hazard class(es)		
Not applicable	Not applicable	Not applicable
Not applicable	Not applicable	Not applicable
14.4. Packing group		
Not applicable	Not applicable	Not applicable
14.5. Environmental hazards		
Not applicable	Not applicable	Not applicable
No supplementary information available		

14.6. Special precautions for user

- Overland transport

Not applicable

- Transport by sea

Not applicable

- Air transport

Not applicable

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No REACH Annex XVII restrictions

Hyacinth BMT Crystal (5-Benzylmercaptotetrazole) is not on the REACH Candidate List

Hyacinth BMT Crystal (5-Benzylmercaptotetrazole) is not on the REACH Annex XIV List

15.1.2. National regulations

Germany

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Regulatory reference	: WGK 3, Highly hazardous to water
Storage class (LGK, TRGS 510)	: LGK 13 - Non-combustible solids
Employment restrictions	: Observe restrictions according Act on the Protection of Working Mothers (MuSchG) Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)
Hazardous Incident Ordinance (12. BImSchV)	: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

15.2. Chemical safety assessment

For this product a chemical safety assessment was not carried out.

SECTION 16: Other information

Full text of H- and EUH-statements:

Eye Dam. 1	Serious eye damage/eye irritation, Category 1
H315	Causes skin irritation.
H318	Causes serious eye damage.
H335	May cause respiratory irritation.
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT SE 3	Specific target organ toxicity – Single exposure, Category 3, Respiratory tract irritation

MSDS (Reach Anhang II) EMP

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.