

An ISO 9001 : 2015 & GMP Certified Company

101, Aarkay Ruby Industrial Estate (1B), Opp Shree Narayan Industrial Estate, Chinchpada, Vasai East, Waliv, Maharashtra 401208. Tel: + 91 98200 41841

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MATERIAL SAFETY DATA SHEET (MSDS)

SECTION 1 Product identifiers

Product name: Benzotriazole, 99%

Product Code: B 1615 CAS-No.: 95-14-7

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Acute toxicity (Oral) Category 4 Acute toxicity (Inhalation) Category 4 Skin corrosion/irritation Category 2

Serious eye damage/eye irritation Category 2

Long-term aquatic hazard Category 3

2.2 Label elements

Pictograms or hazard symbols

Signal word Warning

Hazard statements

H302+H332- Harmful if swallowed or if inhaled.

H315- Causes skin irritation.

H319- Causes serious eye irritation.

H412- Harmful to aquatic life with long lasting effects.

Precautionary statements

P261- Avoid breathing dust/fume/gas/mist/vapours/spray.
P270- Do not eat, drink or smoke when using this product.

P280- Wear protective gloves, eye protection.

P302+P352+P332+P313+P362+P364- IF ON SKIN: Wash with plenty of water. If skin irritation occurs:Get medical advice or

attention. Take off contaminated clothing and wash it before reuse.

P304+P340+P312- IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call

aPOISON CENTER or doctor if you feel unwell.

P305+P351+P338+P337+P313- IF IN EYES: Rinse cautiously with water for several minutes. Removecontact lenses, if

present and easy to do. Continue rinsing. If eye irritation persists: Get medical adviceor

attention.

2.3 Other hazards Dust explosion possible if in powder or granular form, mixed with air.

Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

SECTION 3: Composition/information on ingredients

3.1 Substances

Components: 1,2,3-Benzotriazole Percent: >98.0%(HPLC)(T) CAS RN: 95-14-7 EC-No: 202-394-1

Synonyms: Azimidobenzene Chemical Formula: C6H5N3

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISONCENTER or doctor/physician if you feel unwell.

Skin contact: Remove/Take off immediately all contaminated clothing. Gently wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention.

Eye contact: 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.

Ingestion: Call a POISON CENTER or doctor/physician if you feel unwell. Rinse mouth.

Protection of first-aiders: A rescuer should wear personal protective equipment, such as rubber gloves and air-tight goggles.

4.2 Most important symptoms and effects, both acute and delayed

No data available

4.3 Indication of any immediate medical attention and special treatment needed

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No data available

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: Dry chemical, foam, water spray, carbon dioxide.

5.2 Special hazards arising from the

substance or mixture

Explosion risk in case of fire. Fight fire remotely due to the risk of explosion.

Take care as it may decompose upon combustion or in high temperatures to generate poisonous fume. Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

5.3 Advice for firefighters Fire-extinguishing work is done from the windward and the suitable fire-extinguishing method according to the surrounding situation is used. Uninvolved persons should evacuate to a safe place. In case of

fire in the surroundings: Keep containers cool by spraying with water. Eliminate all ignition sources if

safe to do so. When extinguishing fire, be sure to wear personal protective equipment

SECTION 6: Accidental release measures

6.1 Personal precautions, protective

equipment and emergency procedures

Use personal protective equipment. Keep people away from and upwind of spill/leak. Entry tonon-involved personnel should be controlled around the leakage area by roping off, etc

6.2 Environmental precautions Prevent product from entering drains

6.3 Methods and materials for

containment and cleaning up

Sweep dust to collect it into an airtight container, taking care not to disperse it. Adhered or collectedmaterial should be promptly disposed of, in accordance with appropriate laws and regulations.

6.4 Reference to other sections For disposal see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling Handling is performed in a well ventilated place. Wear suitable protective equipment. Be careful not tocause leakage, overflow, or dispersion. Steam should not be generated unnecessarily. Keep away fromheat/sparks/open flame/hot surfaces. -No smoking. Take measures to prevent the build up of

electrostatic charge. Use explosion-proof equipment. Avoid shock and friction. Wash hands and facebefore breaks and immediately after handling the product. Use a local exhaust if dust or aerosol will begenerated. Avoid contact with skin, eyes and clothing.

7.2 Conditions for safe storage,

including any incompatibilities

Keep container tightly closed. Store in a cool and dark place. Be sure not to give the container

unexpected impacts, such as falling down or falling off. Store away from incompatible materials suchas oxidizing agents.

7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters No data available

8.2 Exposure controls Install a closed system or local exhaust as possible so that workers should not be exposed directly. Also install safety shower and eye bath.

Respiratory protection: Dust respirator. Follow local and national regulations.

Hand protection: Protective gloves.

Eye protection: Safety glasses. A face-shield, if the situation requires.

Skin and body protection: Protective clothing. Protective boots, if the situation requires.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state (20°C): Solid

Form: Crystal - Powder

Colour: White - Slightly pale yellow

Odour: Characteristic

Melting point/freezing point: 98°C

Boiling point/range: 204°C /2.0kPa

Flash point: No data available (Calculated value:>60°C)

Flammability or explosive limits:

Lower: No data available :No data available

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Vapour pressure: 5Pa/20°C

Relative density: No data available Solubility(ies):

[Water] Slightly soluble (19.8g/L, 25°C)

[Other solvents]

Soluble: Alcohols, Benzene, Chloroform, Toluene, Dimethylformamide(DMF), Ethyleneglycol

Slightly soluble: Acetone
Partition coefficient: 1.44
n-octanol/water:

Autoignition temperature: 210°C

Decomposition temperature: No data available Dynamic Viscosity: No data available Kinematic viscosity: No data available

9.2 Other safety information No data available

SECTION 10: Stability and reactivity

10.1 Reactivity No data available

10.2 Chemical stability Stable under proper conditions.

10.3 Possibility of hazardous reactions Dust explosion possible if in powder or granular form, mixed with air.

May explosively decompose on heating, shock, friction, etc.

10.4 Conditions to avoid Heat, Static discharge, Shock, Friction

10.5 Incompatible materials Oxidizing agents, Strong bases, Heavy metals

10.6 Hazardous decomposition products Carbon dioxide, Carbon monoxide, Nitrogen oxides (NOx)

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Routes of Entry: Absorbed through skin. Dermal contact. Eye contact. Toxicity to Animals:

Oral LD50 Rat: 1500 mg/kg; Dermal LD50 Rabbit: 2000mg/kg

Inhalation LC50 Rat: > 50mg/L.

Chronic Effects on Humans: CARCINOGENIC EFFECTS: Classified None. by NTP, None. by OSHA, None. by NIOSH.

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans: Not available.

SECTION 12: Ecological information

12.1 Toxicity

Fish: 48h LC50:291 mg/L (Oryzias latipes)

Crustacea: No data available Algae: No data available

12.2 Persistence and degradability 2 % (by BOD), 0 % (by HPLC), 1 % (by TOC)

12.3 Bioaccumulative potential 1.1 - 3.0 (conc. 1 mg/L) , 4.8 - 15 (conc. 0.1 mg/L)

12.4 Mobility in soil Log Pow: 1.44

Soil adsorption (Koc): 145

Henry's Law (PaM 3/mol): 3.21 x 10-2 12.5 Results of PBT and vPvB assessment

PBT: Not applicable vPvB: Not applicable

12.6 Other adverse effects No data available

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Recycle to process, if possible. Consult your local regional authorities and an expert of disposal. You may be able to dissolve or mix material

with a combustible solvent and little by little burn in a chemical incinerator equipped with an afterburner and scrubber system. If a large amount of the substance is burned at a time, an explosion may occur. Observe all federal, state and local regulations when disposing of the substance.

SECTION 14: Transport information

14.1 UN number Not listed 14.2 UN proper shipping name ADR/RID Not listed IMDG/IMO Not listed

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ICAO/IATA Not listed

14.3 Transport hazard class(es)

ADR/RID Does not correspond to the classification standard of the United Nations IMDG/IMO Does not correspond to the classification standard of the United Nations ICAO/IATA Does not correspond to the classification standard of the United Nations 14.4 Packaging group ADR/RID -

IMDG/IMO -

ICAO/IATA - 14.5 Environmental hazards

Marine pollutant - 14.6 Special precautions for user No data available This substance is not regulated by IATA/ICAO/ARD/RID/IMO/IMDG and is considered to be Non Hazardous for transport by Air/Rail/Road/Sea

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture Water Hazard Classes (WGK): Class 1 - Low hazard to waters Substance of Very High Concern (SVHC) according to the REACH Regulations (EC) No.1907/2006 Not listed

15.2 Chemical safety assessment A chemical safety assessment has not been carried out.

Section 16: Other Information

This safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding the use of hazardous products.

