

1. Product and Company Identification

www.rxmarine.com

Product Name BENZOTRIAZOLE 99 Percent
Part Number RXSOL-19-6245-013

Company Details:....

RX MARINE INTERNATIONAL
105, A wing , BSEL , TECH PARK.
VASHI ,NEW BOMBAY 400703 INDIA

Branch : Kandla, Mumbai , Chennai, Vizag, Kolkata, UAE , OMAN , CANADA and KENYA

Phone +91 22 20871200 - 1400
Fax +91 22 27612100 ::AOH :0091 9821214367
Email mail@rxmarine.com
Website www.rxmarine.com

2. Composition / Information on ingredients

www.rxmarine.com

PRODUCT NAME	Benzotriazole
CAS NUMBER	95-14-7
SYNONYM	1,2,3-Benzotriazole, 1H-Benzotriazole
FORMULA	C ₆ H ₅ N ₃

PRODUCT	CAS NUMBER	% BY WEIGHT
Benzotriazole	95-14-7	100%

3. Hazards Identification

www.rxmarine.com

Emergency Overview

OSHA Hazards Harmful by ingestion, Harmful by skin absorption, Irritant

HMS Classification

Health Hazard	2
Flammability	1
Physical hazards	0
NFPA Rating	
Health Hazard	3
Fire	1
Reactivity Hazard	0

Potential Health Effects

Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	Harmful if absorbed through skin. Causes skin irritation.
Eyes	Causes eye irritation.

4. First Aid Measures

www.rxmarine.com

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area

Inhalation

If inhaled, move person into fresh air. If not breathing give artificial respiration. Consult a physician.

Skin contact

Wash off with soap and plenty of water. Consult a physician.

Eye Contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.

Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

5. Fire-fighting Measures

www.rxmarine.com

Flammable Properties

Flash Point

170 °C (338 °F) - Closed cup

Ignition Temperature

No data available

Suitable Extinguishing Media

Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard.

In a fire or if heated, a pressure increase will occur and the container may burst, with the

risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along

the ground. Vapors may accumulate in low or confined areas or travel a considerable

distance to a source of ignition and flash back.

Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard.

In a fire or if heated, a pressure increase will occur and the container may burst, with the

risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along

the ground. Vapors may accumulate in low or confined areas or travel a considerable

distance to a source of ignition and flash back.

Highly flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard.

In a fire or if heated, a pressure increase will occur and the container may burst, with the

risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along

the ground. Vapors may accumulate in low or confined areas or travel a considerable

distance to a source of ignition and flash back.

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special Protective Equipment for Firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. Accidental Release Measures

www.rxmarine.com

Personal Precautions

Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.

Environmental Precautions

Do not let product enter drains. Discharge into the environment must be avoided.

Methods for Cleaning Up

Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal.

7. Handling and Storage

www.rxmarine.com

Handling

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Storage

Keep container tightly closed in a dry and well-ventilated place.

8. Exposure controls and personal protection

www.rxmarine.com

Contains no substances with occupational exposure limit values

Personal Protective Equipment

Respiratory Protection

Where risk assessment shows air-purifying respirators are appropriate use a dust mask type N95 (US) or type P1 (EN 143) respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand Protection

Handle with gloves.

Eye Protection

Safety glasses

Skin and Body Protection

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Hygiene Measures

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

9. Physical and chemical properties

www.rxmarine.com

Appearance

Form

Solid

Colour

Beige

Safety Data

pH

No data available

Melting Point

97 °C (207 °F)

Boiling Point

No data available

Flash point

170°C (338°F) - Closed cup

Ignition Temperature	No data available
Lower Explosion Limit	No data available
	materials. Extremely flammable in the presence of the following materials or conditions: oxidizing
	materials.
Upper Explosion Limit	No data available
Vapor Pressure	0.05 hPa (0.04 mmHg) at 20°C (68°F)
Water Solubility	No data available
Partition Coefficient	N-Octanol/Water log Pow: 1.44

10. Stability and reactivity

www.rxmarine.com

Storage Stability	Stable under recommended storage conditions.
Conditions to Avoid	Exposure to light may affect product quality.
Materials to Avoid	Strong oxidizing agents, Heavy metals

Hazardous Decomposition Products

Hazardous Decomposition Products Formed under Fire Conditions	Carbon oxides and nitrogen oxides (NOx)
--	---

11. Toxicological information

www.rxmarine.com

Acute Toxicity

LD50 Oral ☑ Rat	560 mg/kg
LC50 Inhalation - Rat - 4hrs	1400 ppm
LD50 Dermal ☑ Rat	> 1,000 mg/kg

Irritation and Corrosion

Skin ☑ rabbit	No skin irritation
Sensitisation	No data available

Chronic Exposure

Carcinogenicity - Rat ☑ Oral	Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Brain and Coverings: Tumors.
-------------------------------------	--

Carcinogenicity - Mouse ☑ Oral	Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Lungs, Thorax, or Respiration: Tumors.
---------------------------------------	--

Lungs, Thorax, or Respiration: Bronchiogenic carcinoma.

This product is or contains a component that is not classifiable as to its carcinogenicity based on its

IARC, ACGIH, NTP, or EPA classification.

IARC	No component of this product present at levels greater than or equal to 0.1% is identified as
-------------	---

	probable, possible or confirmed human carcinogen by IARC.
ACGIH	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.
NTP	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.
OSHA	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.
	Genotoxicity in vitro - Rat - Embryo
	Morphological transformation.
Signs and Symptoms of Exposure	To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.
Potential Health Effects	
Inhalation	May be harmful if inhaled. Causes respiratory tract irritation.
Skin	Harmful if absorbed through skin. Causes skin irritation
Eyes	Causes eye irritation.
Ingestion	Harmful if swallowed.
Additional Information	
RTECS	DM1225000

12. Ecological information

www.rxmarine.com

Elimination Information (Persistence and Degradability)	Not readily biodegradable.
Biodegradability Result	
Ecotoxicity Effects	Toxicity to fish LC50 - Lepomis macrochirus (Bluegill) - 25 mg/l - 96 h
	Toxicity to daphnia and other aquatic invertebrates.
	EC50 - Daphnia magna (Water flea) - 91 mg/l - 48 h
Further Information on Ecology	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
	no data available.

13. Disposal considerations

www.rxmarine.com

Product	Observe all federal, state, and local environmental regulations. Contact a
----------------	--

Contaminated packaging

licensed professional waste disposalservice to dispose of this material.
Dispose of as unused product

14. Transport information

www.rxmarine.com

DOT (US)

Not dangerous goods

IMDG

Not dangerous goods

IATA

Not dangerous goods

15. Regulatory information

www.rxmarine.com

OSHA Hazards

Harmful by ingestion, Harmful by skin absorption, Irritant

DSL Status

All components of this product are on the Canadian DSL list.

SARA 302 Components SARA 302

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

SARA 313 Components SARA 313

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

Acute Health Hazard

Massachusetts Right To Know Components

Benzotriazole

Pennsylvania Right To Know Components

CAS Number: 95-14-7

Benzotriazole

New Jersey Right To Know Components

CAS Number: 95-14-7

Benzotriazole

California Prop. 65 Components

CAS Number: 95-14-7

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

16. Other information

www.rxmarine.com

Other Information

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 we 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 Rx Marine International has been advised of the possibility of such damages.

DISCLAIMER OF LIABILITY :The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.