

MATERIAL SAFETY DATA SHEET OF

CLOFENTEZINE 98% TC

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Supplier: Shanghai Bosman Industrial Co., Ltd.

Street address: No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

FAX: +86 21 63065878

TEL: +86 21 63065878

Product name: Clofentezine 98% TC

2. COMPOSITION/INFORMATION ON INGREDIENTS

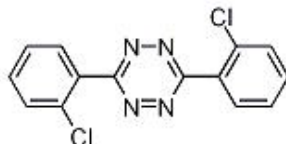
Formulation Type: Technical material (TC)

IUPAC: 3,6-bis(2-chlorophenyl)-1,2,4,5-tetrazine

Molecular weight: 303.1

Molecular formula: C₁₄H₈Cl₂N₄

Molecular structure:



Other ingredients determined not to be hazardous

Ingredient	CAS NO.	Proportion
Clofentezine	74115-24-5	98%
other ingredients	Not available	Balance

3. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Regulation (EC) No 1272/2008

Acute toxicity - Dermal Category 4 - (H312)

Acute toxicity - Inhalation (Vapors) Category 3 - (H331)

Acute aquatic toxicity Category 1 - (H400)

Classification according to 67/548/EEC

Version: 1.0 Issue date: June 1, 2022

Hazard symbols Xi - Irritant
R-code(s) Xi;R36/37/38

Label Elements

Contains Clofentazine

Signal word Danger

Symbols/Pictograms



Hazard statements
H400 - Very toxic to aquatic life
H312 - Harmful in contact with skin
H331 - Toxic if inhaled

Precautionary Statements - P322 - Specific measures (see Emergency Phone Number on this label)
EU (§ 28, 1272/2008) P321 - Specific treatment (see Emergency Phone Number on this label)
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

Other Hazards

Other hazards May be harmful if swallowed May be harmful if inhaled

General Hazards Not applicable

4. FIRST AID MEASURES

Description of first aid measures

General advice If symptoms persist, call a physician.

Inhalation Remove to fresh air. If symptoms persist, call a physician. Artificial respiration and/or oxygen may be necessary. Call a physician. Immediate medical attention is not required. Move to fresh air in case of accidental inhalation of vapors.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. If skin irritation persists, call a physician. Wash contaminated clothing before reuse. Wash off immediately with plenty of water. Immediate medical attention is not required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician. Immediately flush with plenty of water. After initial flushing, remove



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room 1804, No. 1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: June 1, 2022

any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing.

Ingestion Immediate medical attention is not required. Rinse mouth. Drink plenty of water. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician. Self-protection of the first aider Use personal protective equipment as required.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media

Suitable Extinguishing Media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

Special hazards arising from the substance or mixture

Specific hazards arising from the chemical

Thermal decomposition can lead to release of toxic/corrosive gases and vapors

Hazardous combustion products Carbon oxides. Nitrogen oxides (NOx). Phosgene.

Advice for firefighters

Special protective equipment for fire-fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENT RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Avoid contact with eyes and skin. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders Use personal protection recommended in Section 8.

Environmental precautions

Environmental precautions Prevent entry into waterways, sewers, basements or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so.

Prevent product from entering drains. See Section 12 for additional Ecological Information.



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room 1804, No. 1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: June 1, 2022

Should not be released into the environment.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling Ensure adequate ventilation, especially in confined areas. Use personal protective equipment as required. Use with local exhaust ventilation. Do not breathe dust/fume/gas/mist/vapors/spray. Thermal decomposition can lead to release of toxic/corrosive gases and vapors.

General Hygiene Considerations When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Regular cleaning of equipment, work area and clothing is recommended.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep container tightly closed. Keep out of the reach of children. Keep containers tightly closed in a cool, well-ventilated place. Keep in properly labeled containers.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

Exposure controls

Engineering Controls Showers, Eyewash stations, Ventilation systems

Eye/face protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Suitable protective clothing. Apron. Gloves made of plastic or rubber.



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: June 1, 2022

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

Environmental exposure controls Do not allow into any sewer, on the ground or into any body of water.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Powder or loose lumps

Appearance : Magenta

Odour : NA

pH : 5.0-8.0

10. STABILITY AND REACTIVITY

Reactivity

Reactivity: Not applicable

Chemical stability

Stability: Stable under recommended storage conditions.

Possibility of hazardous reactions

Hazardous polymerization: No information available.

Possibility of Hazardous Reactions: None under normal processing.

Conditions to avoid

Conditions to avoid: Extremes of temperature and direct sunlight.

Incompatible materials

Incompatible materials: Strong oxidizing agents.

Hazardous decomposition products

Hazardous Decomposition Products: Carbon oxides. Nitrogen oxides (NOx).

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Acute oral toxicity: LD50 for rats >5200 mg/kg.

Version: 1.0 Issue date: June 1, 2022

Acute skin and eye toxicity: Acute percutaneous LD50 for rats >2100 mg/kg.

Acute eye or skin irritation: Not an eye or skin irritant.

Acute inhalation: LC₅₀ (4 h) for rats >9 mg/l air.

Chronic toxicity

NOEL (2 y) for rats 40 mg/kg diet (2 mg/kg b.w.); (1 y) for dogs 50 mg/kg diet (1.25 mg/kg b.w.).

12. ECOLOGICAL INFORMATION

Birds Acute oral LD50 for mallard ducks >3000, bobwhite quail >7500 mg/kg. Dietary LC50 (8 d) for mallard ducks and bobwhite quail >4000 mg/kg b.w.

Fish LC50 (96 h) for rainbow trout >0.015, bluegill sunfish >0.25 mg/l (limits of solubility).

Daphnia LC50 (48 h) >1.45 µg/l (limit of solubility).

Algae Not toxic to *Scenedesmus pannonicus* up to limit of solubility. Other aquatic spp. Not toxic to aquatic organisms up to the limit of solubility.

Bees Acute LD50 (oral) >252.6 µg/bee; LC50 (contact) >84.5 µg/bee.

Worms Not toxic to earthworms. LC50 >439 mg a.i., as 'Apollo 50 SC' /kg soil.

Other beneficial spp. No known deleterious effects to beneficials, such as predatory mites and predaceous insects.

13. DISPOSAL CONSIDERATION

Product Disposal Dispose of product only by using according to the label, or at an approved landfill.

Container Disposal Triple rinse empty container and add rinsate to the spray tank. Recycle empty container. Otherwise crush and bury in a suitable landfill.

14. TRANSPORT INFORMATION

ADR/RID

U.N. Number 3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Clofentezine)

UN classification: 9

Packing Group III

Environmental Hazard: Yes

IMDG



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: June 1, 2022

U.N. Number 3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Clofentezine)**UN classification:** 9

Packing Group III

Environmental Hazard: No

IATA

U.N. Number 3077

UN proper shipping name Environmentally hazardous substance, solid, n.o.s. (Clofentezine)

UN classification: 9

Packing Group III

Environmental Hazard: Yes

15. REGULATORY INFORMATION

Follow all local, national, international degree, regulations and laws.

16. OTHER INFORMATION

Version: 1.0

Issue date: June 1, 2022

This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

-- END OF MSDS --