

MATERIAL SAFETY DATA SHEET

CLOMAZONE TC

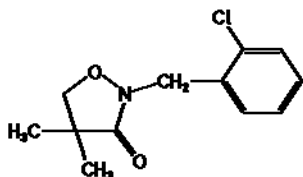
1. Product & Manufacturer information

Product Name: Clomazone

Molecular Formula: C₁₂H₁₄ClNO₂

Molecular Weight: 239.7

Structural Formula:



Chemical Name: 2-(2-chlorobenzyl)-4,4-dimethyl-1,2-oxazolidin-3-one (IUPAC)

Form: Liquid

Color: Light brown

Odor: Slight aromatic

CAS No.: 81777-89-1

Manufacturer: SINOCHEM SHANGHAI CORPORATION

Address: 17-19th Fl., No. 33 He Nan Road(s), Shanghai 20002 China

Phone: +86 21 63374047

2. Composition Information of Ingredients

Chemical name	Content
Clomazone	≥94.0%.
Water	≤0.5%.
Other inert ingredients	Add up to 100%

3. Hazards Identification

Immediate Concerns:

- Brown liquid with a slightly aromatic hydrocarbon odor;
- Slightly combustible; May support combustion at elevated temperatures.
- Thermal decomposition and burning may form toxic by-products.
- For large exposures or fire, wear personal protective equipment.
- Highly to slightly toxic to fish and aquatic organisms;
- Keep out of drains and water courses.

Potential Health Effects:

- Effects from overexposure result from coming into contact with the skin and eyes. -
- Symptoms of overexposure include nasal discharge.

4. First Aid Measures

Shanghai Tenglong Agrochem Co., Ltd www.tlongagro.com
 Tel: (86)21-55063225 Fax: (86)21-55063699
 Add: Yangpu building 24B, No.2005, Huangxing Road, Yangpu Shanghai

Eyes: Flush with plenty of water. Get medical attention if irritation occurs and persists.

Skin: Wash with plenty of soap and water.

Ingestion: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

Inhalation: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, contact a medical doctor.

Notes to Medical Doctor: This product has low oral, dermal and inhalation toxicity. It is non-irritating to the eyes and skin. Treatment is otherwise controlled removal of exposure followed by symptomatic and supportive care.

5. Fire-Fighting Measures

Extinguishing Media: Foam, CO₂ or dry chemical

Fire / Explosion Hazards: Slightly combustible. This material may support combustion at elevated temperatures.

Fire Fighting Procedures: Isolate fire area. Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe smoke, gases or vapors generated.

6. Accidental Release Measures

Slippery when spilt. Avoid accidents, clean up immediately. Wear protective equipment to prevent skin and eye contact. Prevent run off into drains and waterways. Use absorbent (soil, sand or other inert material). Collect and seal in properly labelled containers for disposal. Large Spills: Shut off all possible sources of ignition. Wear protective equipment to prevent skin and eye contact. Avoid breathing in vapours. Work up wind or increase ventilation.

7. Handling and Storage

- Store in a cool, dry, well-ventilated place
- Do not use or store near heat, open flame or hot surfaces.
- Store in original containers only.
- Keep out of reach of children and animals.
- Store above -20°C to keep product from freezing. If frozen, thaw before reuse.
- For recirculation directions, refer to the product label.
- Do not contaminate other pesticides, fertilizers, water, food or feed by storage or disposal.

8. Exposure Controls/Personal Protection

Eyes and Face: For splash, mist or spray exposure, wear chemical protective goggles or a face shield.

Respiratory: For splash, mist or spray exposures wear, as a minimum, a properly fitted half-face or full-face air-purifying respirator which is approved for pesticides. Respirator use and selection must be based on airborne concentrations.

Protective Clothing: Depending upon concentrations encountered, wear coveralls or

long-sleeved uniform and head covering. For larger exposures as in the case of spills, wear full body cover barrier suit, such as a PVC suit. Leather items - such as shoes, belts and watchbands - that become contaminated should be removed and destroyed. Launder all work clothing before reuse (separately from household laundry).

Gloves: Wear chemical protective gloves made of materials such as nitrile brand. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

9. Physical and Chemical Properties

Melting point: 25°C

Boiling point: 275.4°C

Specific gravity or density: 1.192 (20°C)

Solubility: In water: 1100 mg/l at 25°C

In acetone: 1000g/l; n-Heptane: 192g/l; methanol: 969g/l (20°C)

Partition coefficient: log K_{ow} = 2.54

Flash point: 157°C

Vapor pressure: 1.92×10^{-2} Pa at 25°C

10. Stability and Reactivity

Conditions To Avoid: Excessive heat and fire.

Stability: Stable

Polymerization: Will not occur

Hazardous Decomposition Products: Carbon monoxide and/or carbon dioxide, oxides of nitrogen, chlorine and hydrogen chloride

11. Toxicological Information

Acute toxicity:

-Acute oral: LD₅₀ for rats: rats 1369 mg/kg (female); 2077 mg/kg (male)

-Acute dermal: LD₅₀ for rats: >2000mg/kg

-Inhalation: LC₅₀ (4h) for rats: 4.23 mg/l (female); 6.52mg/l (male)

-Skin and eyes: Slightly irritating to skin and moderately irritating to eyes (rabbits)

-Sensitization: Not sensitizer

Teratogenic effects: no teratogenic toxicity.

Mutagenic effects: no mutagenic toxicity.

Carcinogenic effects: not cause carcinogenicity.

12. Ecological And Ecotoxicological Information

Clomazone has a moderate rate of degradation in soil (half-life = 24 days), and is stable to hydrolysis over a wide range of pH. The bioconcentration potential for clomazone is low, with a Log Kow of 2.54, and a measured bioconcentration factor (BCF) of 27-40. Field studies showed that clomazone does not significantly leach below 15 cm in soil and is, therefore, not expected to enter groundwater.

96-hr LC50 Rainbow trout: 19mg/l (Slightly toxic)

48-hr EC50 Daphnia magna: 12.7mg/l (Slightly toxic)



72-hr EC50 Algae (<i>Navicula pelliculosa</i>):	0.136mg/l (Highly toxic)
LD50 for bobwhite quail and mallard ducks:	>2510mg/kg (Oral, slightly toxic)
48-hr LD50 for honeybee:	85.3µg/bee (Oral, slightly toxic)
14-day LD50 for earthworm:	78mg/kg (Slightly toxic)

13. Disposal Considerations

Disposal Method: Open dumping or burning of this material or its packaging is prohibited. If spilled material cannot be disposed of by use according to label instructions, an acceptable method of disposal is to incinerate in accordance with local, state and national environmental laws, rules, standards and regulations. **Container:** Non-returnable containers that held this material should be cleaned, prior to disposal, by triple rinsing. Containers which held this material may be cleaned by being triplerinsed, and recycled, with the rinsate being incinerated. Do not cut or weld metal containers. Vapors that form may create an explosion hazard.

14. Transport Information

Moderately hazardous, place "Caution" sign on package during transportation.

15. Regulatory Information

Products containing clomazone must bear the signal word "Caution" on the label

16. Other Information

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 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 this company. Our responsibility for products sold is subject to our standard terms and conditions, a copy of which is sent to our customers and is also available on request.