

## MATERIAL SAFETY DATA SHEET

### Clomazone 48% EC

#### 1. Product & Manufacturer information

**Product Name:** Clomazone 48% EC

**Use:** Agricultural Herbicide.

**Company:** SHANGHAI TENGLONG AGROCHEM CO., LTD.

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#### 2. Hazards identification

**Risk phrases:** R20/22 Harmful by inhalation and if swallowed  
R36/37 Irritating to eyes and respiratory system.  
R65 Harmful: May cause lung damage if swallowed.

**Safety Phrases:** S2 Keep out of reach of children.

S23 Do not breathe vapour or spray

S24/25 Avoid contact with skin and eyes

S36/37 Wear suitable protective clothing and gloves

#### 3. Composition/information on ingredients

Ingredient	CAS No.	Content ( w/w)
Clomazone	81777-89-1	48%
Calcium dodecylbenzenesulfonate (Emulsifier)	26264-06-2	10%
Solvent naphtha	64742-94-5	Add to 100%

#### 4. First aid measures

**Swallowed:** If swallowed, do not induce vomiting. Give a glass of water. If any discomfort persists seek medical advice.

**Eye:** If in eyes, hold eyes open, flood with water. If discomfort persists see a doctor.

**Skin:** If on skin wash with plenty of soap and water. Remove contaminated clothing.

If irritation occurs and persists see a doctor.

**Inhaled:** Remove patient to fresh air. If breathing discomfort occurs, obtain medical attention.

**Advice to Doctors:** Clomazone has generally low acute toxicity. This product may be irritating. Direct contact with eyes may produce corneal damage, especially if not washed out immediately. Inert ingredients contain aromatic solvents which may produce a chemical pneumonitis; therefore, vomiting is not recommended, and lavage requires intubation. Activated charcoal and cathartics will assist gastrointestinal tract evacuation.

#### 5. Fire fighting measures

**Specific Hazard:** Product is a combustible liquid. Flash point: 71°C.

**Extinguishing media:** Foam, CO<sub>2</sub> or dry chemical

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**Hazards from combustion products:** On burning will emit toxic fumes.

**Precautions for fire-fighters and special protective equipment:** Isolate fire area.

Evacuate downwind. Wear full protective clothing and self-contained breathing apparatus. Do not breathe or contact smoke, gases or vapours generated.

## **6. Accidental release measures**

**Emergency procedures:** Isolate and post spill area. Wear prescribed protective clothing and equipment. Large spills should be dyked or covered to prevent dispersal. Vacuum shovel or pump spilled material into an approved container and dispose of as listed below.

**Material and methods for containment and cleanup procedures:** To clean spill area, tools and equipment, wash with a solution of soap, water and acetic acid/vinegar. Follow this with a neutralisation step of washing the area with a bleach or caustic soda ash solution. Finally, wash with a strong soap and water solution. Absorb, as above, any excess liquid and add both solutions to the drums of waste already collected. Wear protective clothing such as full body cover barrier suit. Keep out unprotected persons and animals. Do NOT allow spilled product or wash solution to enter sewers, drains, dams, creeks or any other waterways.

## **7. Handling and storage**

**Precautions for Safe Handling:** Ensure containers are kept closed until using product. Avoid skin and eye contact and breathing vapour. When opening the container and preparing spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing), elbow length nitrile gloves and face shield or goggles. When using the prepared spray, wear cotton overalls buttoned to the neck and wrist (or equivalent clothing) and elbow length nitrile gloves.

**Conditions for Safe Storage:** DO NOT store near (or allow to contact) fertilizers, fungicides or pesticides. Store in the closed original container, in a cool well ventilated area, out of direct sunlight. Store in a locked room or place away from children, animals, food, feed stuffs, seed and fertilizers. This product is classified as a C1 (Combustible Liquid) for the purpose of storage and handling.

## **8. Exposure controls / personal protection**

### **Engineering controls:**

Use in well ventilated area only. Use local exhaust at all process locations where dust may be emitted. Ventilate all transport vehicles prior to unloading. Keep containers close when not in use.

### **Personal Protective equipment:**

**Work Clothing:** Wear cotton overalls buttoned to the neck and wrist and a washable hat, elbow-length nitrile gloves and face shield or goggles.

**Eye Protection:** When using product, wear chemical protective goggles or face shield.

**Respiratory Protection:** If inhalation risk exists, wear a properly fitted half-face or full-face air purifying respirator which is approved for pesticides (Australian Standards).

**Gloves:** Wear chemical protective gloves made of materials such as nitrile brand or PVC when handling this product. Inspect regularly for leaks. Wash the outside of gloves with soap and water prior to removal.

**Personal Hygiene:** Clean water should be available for washing in case of eye or skin

contamination. Wash skin before eating, drinking or smoking. Shower at the end of the workday.

### **9. Physical and chemical properties**

Light brown clarity liquid

Specific gravity: 1.02 g/mL.

pH: 5.0-9.0

Solubility in Water: This product emulsifies in water.

Flammability: Flammable

Corrosive hazard: Non corrosive; compatible with stainless steel containers.

Flash point: 71°C.

### **10. Stability and reactivity**

This product is considered stable in ambient conditions for a period of at least 2 years after manufacture.

### **11. Toxicological information**

#### **Potential Health Effects:**

Studies with laboratory animals have shown this product to have low oral, dermal and Inhalation toxicity. Symptoms of overexposure to clomazone include decreased activity, tearing eyes, bleeding from the nose and in coordination.

#### **Acute**

**Swallowed:** LD<sub>50</sub> is 1,406 mg/kg for female rats and 2,343 for male rats

**Eye:** Moderately irritating to the eyes.

**Skin:** This product has a low dermal toxicity. The dermal LD50 in the rabbit is > 2000 mg/kg. It is non-sensitizing to the skin. Skin contact may result in irritation with a degreasing action on the skin.

**Inhaled:** Inhalation of vapour may produce irritation of the mucous membranes of the respiratory tract. Acute inhalation LC50 = 4.5 mg/L/4 hour

**Chronic:** In studies with laboratory animals, clomazone did not cause reproductive toxicity, teratogenicity or carcinogenicity. Liver enlargement and elevated cholesterol levels are often noted in laboratory animals that have ingested large doses of clomazone during their lifespan.

### **12. Ecological information**

**Environmental Toxicology:** Clomazone has moderate to slight toxicity to aquatic algae, arthropods and fish. Clomazone is slightly toxic to birds. Do not contaminate sewers, drains, dams, creeks or any other waterways with product or the used container.

**Environmental Properties:** Clomazone is readily degraded in soils under aerobic and anaerobic conditions (half life = 1 to 4.5 months). Clomazone is stable to chemical hydrolysis. Clomazone has a low potential for movement in the soil, and with a Log Pow of 2.5 and a bioconcentration factor of 27, is unlikely to accumulate in the environment.

### **13. Disposal considerations**

**Spills & Disposal:** Isolate and post spill area. Wear prescribed protective clothing and

equipment. Large spills should be dyked or covered to prevent dispersal. Keep out animals and unprotected persons. Keep material out of streams and sewers. Vacuum, shovel or pump waste into an approved drum. To decontaminate spill area, tools and equipment, wash with a suitable solution (ie organic solvent, detergent, bleach or caustic) and add the solution to the drums of wastes already collected. Label for contents. Dispose of drummed wastes, including decontamination solution, in accordance with the requirements of Local or State Waste Management Authorities.

**Disposal of empty containers:** Break, crush, puncture and bury empty containers in a local authority landfill. If not available bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, vegetation and roots. Empty containers and product should not be burnt.

#### **14. Transport information**

This product is not classified as a Dangerous Good. Product is a C1 combustible liquid.

#### **15. Regulatory information**

EC Symbols: Xn (Harmful)  
Xi (Irritant)

EC Risk Phrases: R20/22 (Harmful by inhalation and if swallowed)  
R36 (Irritating to eyes)  
R52 (Harmful to aquatic organisms)

#### **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.