

**1: IDENTIFICATION**

Chemical Name	1-[(2-chloro-1,3-thiazol-5-yl)methyl]-3-methyl-2-nitroguanidine	
Synonyms	Clothianidin 50% WG	Trade Name DANZHI
Uses	Insecticide	Molecular Formula C <sub>6</sub> H <sub>8</sub> CIN <sub>5</sub> O <sub>2</sub> S
Manufacturer/Supplier	Ulink AgriTech Pvt. Ltd. Office Nos. 001 And 002, Ground Floor Wing "A" And Nos. 003 And 004 Ground Floor Wing "B", Nyati Tech Park, Wadgaon Sheri, Pune - 411014, Maharashtra	
Emergency Contact	9503095030	E-mail <a href="mailto:info@agrostar.in">info@agrostar.in</a>

**2: COMPOSITION/INFORMATION OF INGREDIENTS**

Chemical Name	CAS #	Percent or Content (w/w)
Clothianidin	210880-92-5	50.0%
Other Ingredients	-	50.0%

**3: HAZARD IDENTIFICATION**

Physical/ Chemical hazard	Aquatic Chronic Category 1
Environmental hazard	H410 Very toxic to aquatic life with long lasting effects

**4: FIRST AID MEASURES**

**General:** Have the product container, label or safety data sheet while seeking medical attention, a poison control center or physician, or going for treatment.

**Inhalation:** Move patients to fresh air. Keep the patients warm and at rest. If person is not breathing then give artificial respiration, preferably mouth-to-mouth if possible. Allow patients to rest. Immediately seek medical attention.

**Ingestion:** Rinse mouth with water and give plenty of water to drink. Do not induce vomiting unless told by doctor. Do not give anything by mouth to an unconscious person. Seek medical attention immediately and show this container or label.

**Skin Contact:** In case of contact with product, wash immediately skin area with plenty of water and soap. Speed in removing material from skin is extremely important. Remove and isolate contaminated clothing and shoes. Call medical attention.

**Eye Contact:** Rinse immediately with plenty of water for several minutes. After 5 minutes remove contact lenses if present and continue rinsing with plenty of water. Continue to rinse with eyelid wide open for at least 15-20 minutes. Seek medical attention if irritation develops.

**Note to Physician:** No specific Antidote. Treat symptomatically.

**5: FIRE FIGHTING MEASURES**

**Extinguishing Media:** Water spray, alcohol-resistant foam, dry chemical powder or carbon dioxide

**Specific Hazards:** In case of fire, product may produce dense black smoke containing hazardous products of combustion as it contain combustible organic ingredients and exposure to this smoke may be a hazard to health.

**Hazardous Thermal (de)composition:** None known.

**Special Procedures:** Evacuate area and fight fire upwind from a safe distance. Foam or dry chemical fire extinguishing systems are preferred to prevent environmental damage from excessive water runoff. Minimize use of water to prevent environmental contamination. Dike and collect water used to fight fire to prevent environmental damage due to runoff. Do not discharge extinguishing water into the drain or water bodies.

**Protection of Fire Fighters:** Do not breathe a fumes. Wear a self contained breathing apparatus. Wear suitable protective gloves and eye/face protection.

**6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing fume. Ensure there is no open flame, heat or spark in the spillage area. Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from spill/ fumes.

**Environmental Precaution:** Do not allow runoff to enter drains and public waters. Notify the authorities if product enters.

**Methods for Cleaning-up:** Collect spilled liquid with non-combustible absorbent material and place in waste disposal container. Clean contaminated floors and objects thoroughly with water and detergents. Avoid solvent. Dispose of contaminated absorbent material in accordance with local regulations. If significant amount of product enters into drain, notify the local authorities.

**7: HANDLING & STORAGE**

**Handling:** Do not smoke, drink, or eat during handling. Wash hands using liquid detergent. Wear protective clothing to avoid contact and/or inhalation with the product. Good personal hygiene procedures must be practiced.

**Specific Conditions:** Good local exhaust ventilation.

**Storage:** Store in dry, cool, well-ventilated area and away from direct sunlight. Keep in original container and tightly closed when not in use. Store in locked room and away from children, seeds, fertilizer, foods and animal feeds.

**8: EXPOSURE CONTROL/PERSONAL PROTECTION**

**Engineering Measures:** Ensure area is well-ventilated and set up emergency exits and the risk-elimination area. Handle in accordance with good industrial hygiene and safety practice.

**General Protection:** Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves and face shield. After use and before eating, drinking and smoking, wash hands, arms and face thoroughly with soap and water. After each day's use, wash gloves and contaminated clothing.

**Personal Protection:** Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

**Respiratory Protection:** Always use NIOSH/MSHA approved respiratory protection equipment with a universal filter type including particle filter.

**Skin Protection:** Wear suitable protective clothing, including boots, gloves, lab coat, apron or cover all, as appropriate to avoid skin contact. Any clothing or other absorbent material which has been drenched or heavily contaminated must be discarded.

**Hand Protection:** Chemical-resistant gloves made of any waterproof material such as barrier laminate, butyl rubber, nitrile rubber, neoprene rubber, natural rubber, polyvinyl chloride (PVC) or Viton.

**Eye Protection:** Safety goggles, chemical splash goggles or face shield for eyes protection should be used. Safety showers and eyewash should be easily available.

**Others:** Wash clothing before reusing.

## 9: PHYSICAL/CHEMICAL PROPERTIES

**Appearance:** Granules

**Odour:** Weak odour

**Physical State:** Solid

**Colour:** Off-white to beige

**pH:** 6.5-11.0 (1% aqueous solution)

**Melting Point [°C]:** 176.8 (Technical)

**Suspensibility:** 89%

**Bulk Density [g/cc]:** 0.45 – 0.65

## 10: STABILITY & REACTIVITY

**Stability:** Stable under normal circumstances.

**Conditions to Avoid:** None known

**Material to Avoid:** None known

**Hazardous Decomp. Products:** No hazardous decomposition products are known.

**Hazardous Reactions:** No dangerous reaction known under conditions of normal use.

## 11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : 5000

Rat inhalation LC50 [mg/l/4h] : >5

Skin irritation (rabbit): Non-irritant

Dermal (rat) LD50 [mg/kg]: >2000

Skin Sensitization (Guinea Pig): Non-Sensitizer

Eye irritation (rabbit): Non Irritant

## 12: ECOLOGICAL INFORMATION

### Ecotoxicity

Rainbow trout LC50 (96 h)[mg/L]: >100

Daphnia EC50 (48 h) [ mg/L]: >120

Algae EbC50 (72 hrs) [mg/L]: 55

**Bio-accumulation Potential:** Low Bioaccumulation potential

**Persistence, Degradability and Mobility in Soil:** Very persistent in soil and water; Moderately mobile

## 13: DISPOSAL CONSIDERATION

**Waste-disposal Procedures:** Dispose of this product only according to the label. Do not contaminate drains, streams, rivers or waterways with the chemical or used container. Where possible recycling is preferred to disposal or incineration. If recycling is not practicable, dispose of in compliance with local regulations.

**Contaminated Packaging:** Empty remaining contents and the rinse containers thrice before disposal. Empty containers should be taken to an approved waste handling site for recycling or disposal. Do not re-use empty containers unless they are specifically designed to be refilled. If burnt, avoid inhalation of smoke (if burning permitted).

## 14: TRANSPORT INFORMATION

**UN No.** 3077      **Proper Shipping Name:** Environmentally Hazardous substances, Solid, n.o.s. (Clothianidin)

**Land Transport (ADR/RID):** Class-9, Packaging group-III

**Sea Transport (IMO/ IMDG):** Class-9, Packaging group-III, Marine Pollutant - Yes

**Air Transport (IATA / ICAO):** Class-9, Packaging group-III, Environmental hazards mark - Yes

## 15: REGULATORY INFORMATION

**Hazard Symbol:** GHS09

**H-Statement:** H410 Very toxic to aquatic life with long lasting effects

## 16: OTHER INFORMATION

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