



ULINK AGRITECH PRIVATE LIMITED
MATERIAL SAFETY DATA SHEET : AGLORO

1: IDENTIFICATION

Chemical Name	O, O-diethyl O-3,5,6-trichloro-2-pyridylphosphorothioate		
Synonyms	Chlorpyrifos 20% EC	Trade Name	AGLORO
Uses	Insecticide	Molecular Formula	C ₉ H ₁₁ Cl ₃ NO ₃ PS
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	info@agrostar.in

2: COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Percent or Content (w/w)
Chlorpyrifos Technical	2921-88-2	20.00%
Solvent (naphtha)	64742-94-5	80.00%

3: HAZARD IDENTIFICATION

Human Health Hazard:	H335 May cause respiratory irritation	H315 Causes skin irritation	H319 Cause serious eye irritation
Environmental Hazard:	Toxic to bees	Aquatic hazard Chronic Category 1	

4: FIRST AID MEASURES

General: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection)

Inhalation: Move patients to fresh air. If person is not breathing, call an emergency responder or ambulance, then give artificial respiration; if by mouth to mouth use rescuer protection (pocket mask, etc). Immediately get medical attention and poison control center.

Ingestion: Immediately call a poison control center or doctor. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give any liquid to the person. Do not give anything by mouth to an unconscious person.

Skin Contact: In case of contact with product, rinse skin immediately with plenty of water for 15-20 minutes. 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: Treatment of poisoning - 1. Atropinise the patient immediately and maintain full atropinisation by repeated doses of 2 to 4 mg at 5 minutes interval for hours together. The need for further atropine administration is indicated by the continuance of symptoms. 2. Dissolve 1-2 gm of 2 PAM in 10 ml distilled water and intravenously very slowly for 10-15 minutes. Treat symptomatically.

5: FIRE FIGHTING MEASURES

Extinguishing Media: Water fog or fine spray. Dry chemical fire extinguishers. Carbon dioxide fire extinguishers. Foam. Alcohol resistant foams (ATC type). General purpose synthetic foams (including AFFF) or protein foams may function, but will be less effective.

Unsuitable Extinguishing Media: Direct water stream as it may spread fire

Hazardous Thermal (de)composition: Harmful and toxic vapours/gasses may include and are not limited to: Sulphur oxides, phosphorous compounds, nitrogen oxides, hydrogen chloride, carbon monoxide, carbon dioxide.

Special Procedures: Do not discharge extinguishing water into the environment. Move containers away from area if it can be done without risk. If possible remove containers from fire zone, cool them with water spray.

Protection of Fire Fighters: Wear positive-pressure self-contained breathing apparatus and protective fire fighting clothing (includes fire fighting helmet, coat, trousers, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Isolate area and keep unnecessary and unprotected personnel from entering the area. Keep personnel out of low areas. Keep upwind of spill. Ventilate area of leak or spill. Eliminate all sources of ignition

Environmental Precaution: Prevent entry to sewers and public waters. Notify the authorities if product enters sewers or public waters.

Methods for Cleaning up: Clean up any spills as soon as possible, using an absorbent material to collect it. Collect spilled material in sealed containers. Use explosion-proof equipment in clean up procedure, which may produce sparks. Remove according to national or local legislation clean the polluted area. Do not dump into the sewer, on the ground or into any body of water.

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. Eliminate all sources of ignition from areas where the material is handled or used. Good personal hygiene procedures must be practiced.

Specific Conditions: Good local exhaust ventilation. Full face protective mask.

Storage: Store in dry, cool, well-ventilated area, and away from source of ignition and out of reach of children. Keep in original container and tightly closed when not in use.

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Ensure area is well-ventilated and there is no lighting and electrical equipment as source of ignition.

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: Must wear suitable protective clothing. Long-sleeve shirt, long pants, shoes plus socks. 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: Liquid

Density[g/cc]: 0.97

Physical State: Liquid

Colour: Brown

Odour: Aromatic

Flashing Point [°C]: >24.5

Solubility in water: Emulsifiable

pH: 6 - 8

Acidity: 0.15% w/w (max.) as H₂SO₄

10: STABILITY & REACTIVITY

Stability: Stable for under normal circumstances but unstable at elevated temperature

Hazardous decomposition products: Decomposition products depend upon temperature, air supply and the presence of other materials. Decomposition products can include and are not limited to: Hydrogen chloride, Organic sulfides, Sulfur dioxide. Toxic gases are released during decomposition

Conditions to avoid: Avoid temperature above 50 °C. Active ingredient decomposes at elevated temperatures, which leads to generation of gas and can cause pressure in closed systems

Incompatible Materials: Avoid contact with oxidizing materials. Avoid contact with: Bases. Strong acids

11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : 670

Rat inhalation LC50 [mg/l/4h] : > 1.87

Skin irritation (rabbit): Non irritant

Dermal (rat) LD50 [mg/kg]: > 4000

Skin Sensitization (Guinea Pig): Weak sensitizer

Eye irritation (rabbit): Mildly irritant

12: ECOLOGICAL INFORMATION

Ecotoxicity

Toxicity: Material is very toxic to aquatic organisms and highly toxic to birds based on dietary basis.

LC50 (96 h) Bluegill sunfish: 0.002-0.10 mg/l Rainbow trout: 0.007-0.051 mg/l

LD50 Oral: 360 ng/bee, LD50 Contact: 70 ng/bee

Environmental Fate

Persistence, Degradability and Mobility in soil: Fairly stable to degradation in soils with half-lives reported over a wide range of 7-120 days. Low mobility in soil.

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.

Contaminated packaging: (1) Rinse containers before disposal. Add rinsing's to the spray tank. DO NOT dispose of undiluted chemicals onsite.

(2) Dispose of rinsed, empty containers at a local authority landfill. If no landfill is available, dispose as per the guidelines of regulatory authorities.

14: TRANSPORT INFORMATION

UN No. 1993

Proper Shipping Name: FLAMMABLE LIQUID, N.O.S.

Land transport (ADR/RID): Class-3, Packing Group-III

Sea transport (IMO/IMDG): Class-3, Packing group-III, Marine Pollutant-Yes

Air transport (IATA/ICAO): Class-3 Packing group-III, Environmental hazard mark-Yes

15: REGULATORY INFORMATION

Hazard Symbol: T - Toxic, N - Dangerous for the environment

Phrases R: R40, R25, R65, R66, R67, R51/53

Phrases S: S36/37, S45, S61

16: OTHER INFORMATION

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