



ULINK AGRITECH PRIVATE LIMITED MATERIAL SAFETY DATA SHEET: CLAUDIUS

1: IDENTIFICATION

Chemical Name	Prop-2-ynyl(R)-2-[4-(5-chloro-3-fluoro-2-pyridyloxy) phenoxy] propionate		
Synonyms	Clodinafop Propargyl 15% WP	Trade Name	CLAUDIUS® (CLAUDIUS)
Uses	Herbicide	Molecular Formula	C ₁₇ H ₁₃ ClFNO ₄
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)
Clodinafop Propargyl	105512-06-9	15.00%
Other Ingredients	-	85.00%

3: HAZARD IDENTIFICATION

Human Health Hazard:	Causes irritation to the eyes, skin and respiratory tract. Skin allergies are possible. Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.
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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 and keep warm and at rest in a position comfortable for breathing. If breathing is difficult, treat with artificial respiration. Immediately seek medical attention if symptoms are severe or persist
Ingestion:	Rinse mouth with water thoroughly. Do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention or poison control center immediately and show this container or label.
Skin Contact:	In case of contact with product, remove contaminated clothes and wash exposed skin area with plenty of water and soap immediately. Seek medical attention if irritation persists.
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 or fog, alcohol-resistant foam, dry chemical powder or carbon dioxide
Unsuitable Extinguishing Media:	Solid water stream as it may scatter and spread fire.
Specific Hazards:	If involved in a fire, it will emit hydrogen chloride and possibly organochlorine compounds.
Hazardous Thermal (de)composition:	Toxic and irritating vapours or gases will release on combustion.
Special procedures:	Evacuate area and fight fire upwind from a safe distance. Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide for extinguishing small fire and alcohol-resistant foam or water spray for extinguishing large fire. 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 full protective clothing and self-contained breathing apparatus.

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions:	Ensure adequate ventilation. Avoid contact with the skin, eyes and clothing. Avoid dust formation. Use personal protective equipment. Evacuate personnel to safe areas and keep them away from and upwind of spill/leak.
Environmental Precaution:	Do not discharge into the subsoil/ material. Do not allow runoff to enter drains and public waters. Notify the authorities if product enters.
Methods for Cleaning-up:	Absorb spills with inert material and transfer to a container for disposal according to local regulations. Clean contaminated floors and objects thoroughly with water and detergents.

7: HANDLING & STORAGE

Handling:	Do not smoke, drink, or eat during handling. Wash hands and other exposed areas with mild soap and water before and after handling material. Wear protective equipments to avoid contact and/or inhalation with the product. Wash clothing and equipment before reuse. Good personal hygiene procedures must be practiced.
Specific Conditions:	Good local exhaust ventilation.
Storage:	Store in dry, cool, well-ventilated area. Keep away from heat and protect from direct sunlight and moisture. Keep in original container and tightly closed when not in use. Keep product away from seeds, fertilizer, foods and animal feeds. Keep out of reach of the children.

8:EXPOSURE CONTROL/PERSONAL PROTECTION

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

General Protection: Avoid breathing dust, vapours or aerosols. Avoid contact with eyes and skin. While handling the product wear cotton overalls buttoned to the neck and wrist, elbow-length PVC gloves. 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 long sleeved shirt, long pants, gloves, coveralls, and boots to avoid skin contact. Use a self-contained breathing apparatus in cases of emergency spills, when exposure levels are unknown, or under any circumstances where air-purifying respirators may not provide adequate protection.

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 should be used. Safety showers and eyewash should be easily available.

Others: Wash clothing before reusing.

9:PHYSICAL/CHEMICAL PROPERTIES

Appearance: Fine powder	Physical State: Solid	Odour: Characteristic	Bulk Density[gm/ml]: 0.35
Colour: Snow white	pH: 4.5-7	% Persistent Foam: Max.: 40 ml after 1 min.	

10:STABILITY & REACTIVITY

Stability: Stable under normal circumstances.

Conditions to Avoid: Heat, direct sunlight and moisture

Hazardous Decomp. Products: On combustion or thermal decomposition, toxic and irritating fumes/vapors may released.

Materials to Avoid: Strong oxidizers, strong acids, alkalis.

Polymerization: Polymerization will not occur

11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : >2000	Rat inhalation LC50 [mg/l/4h] : >3500	Skin irritation (rabbit): Moderate irritant
Dermal (rat) LD50 [mg/kg]: >4000	Skin Sensitization (Guinea Pig): Potential skin sensitizer	Eye irritation (rabbit): Moderate irritant

12: ECOLOGICAL INFORMATION

Ecotoxicity:

Crap fish LC50 (96 hrs)[mg/L]: 0.46 Daphnia magna EC50(48 hrs) [mg/L]: >74 Algae EC50 (96 hrs)[mg/L]: 25

Bio-accumulation Potential: No data available

Persistence, Degradability and Mobility in soil: No data available

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 and add residue in spray tank. Empty containers should be taken to an approved waste handling site for recycling or disposal. Avoid contamination of any water supply with chemical or empty container.

14: TRANSPORT INFORMATION

UN No. 3082 **Proper Shipping Name:** Environmentally Hazardous Substance, solid, N.O.S (Clodinafop propargyl)

Land Transport (ADR/RID): Class-9, Packing Group-III **Sea Transport (IMO/IMDG):** Class-9, Packing group-III, Marine Pollutant-Yes

Air Transport (IATA/ICAO): Class-9 Packing group-III, Environmental hazard mark-Yes

15: REGULATORY INFORMATION

Approved Handlers: This product must be under the care of an approved handler during use. Tracking requirements apply.

16: OTHER INFORMATION

DISCLAIMER OF LIABILITY The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.

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