

1: IDENTIFICATION

Chemical Name	Clodinafop Propargyl: prop-2-ynyl (2R)-2-[4-[(5-chloro-3-fluoro-2-pyridinyl)oxy]phenoxy]propanoate Metsulfuron Methyl: methyl 2-[(4-methoxy-6-methyl-1,3,5-triazin-2-yl)carbamoyl sulfamoyl]benzoate		
Synonyms	Clodinafop Propargyl 15% + Metsulfuron Methyl 1% WP	Trade Name	FOGGER ®
Uses	Herbicide	Molecular Formula	C ₁₇ H ₁₃ ClFNO ₄ + C ₁₄ H ₁₅ N ₃ O ₆ 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	info@agrostar.in

2: COMPOSITION/INFORMATION OF INGREDIENTS

Chemical Name	CAS #	Percent or Content (w/w)
Clodinafop-propargyl	105512-06-9	15.00%
Cloquintocet-mexyl	99607-70-2	3.75%
Metsulfuron-methyl	74223-64-6	1.00%
Other Ingredients	-	80.25%

3: HAZARD IDENTIFICATION

Human Health Hazard: May cause eye irritation
 Danger of serious damage to health by prolonged exposure if swallowed.

Environment Hazard: Toxic to fish

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. Allow patients to rest. Immediately seek medical attention.

Ingestion: Repeatedly administer medicinal charcoal in a large quantity of water. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told by a physician. 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 and give supportive therapy.

5: FIRE FIGHTING MEASURES

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

Unsuitable Extinguishing Media: Water jet

Specific Hazards: The product is combustible. Exposure to harmful and toxic fumes released during the combustion of product

Hazardous Thermal (de)composition: In the event of fire, toxic and noxious fumes of oxides of carbon, nitrogen or sulphur and hydrogen sulphide/ chloride/ fluoride may release.

Special Procedures: Collect extinguishing water separately and do not discharge into the drain or water bodies. If risk of water pollution occurs, notify appropriate authorities. Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

Protection of Fire Fighters: Do not breathe a fumes, Wear fire/ flame resistant/retardant clothing and self-contained breathing apparatus. Use respirator to protect from fumes

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Ensure adequate ventilation. Eliminate all sources of ignition in the vicinity of the spill. Ensure all sources of ignition is removed. Avoid contact with the skin and the eyes. Use personal protective equipment. Evacuate personnel to safe areas and keep them away from and upwind of spill/leak. Take precautionary measures against static discharges.

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

Methods for Cleaning-up: If possible, collect pure material first, this may be reusable. Reduce dust spreading with water spray collect rinsate. Collect and transfer into waste disposal containers. Minimize the dust formation. Clean contaminated floors and objects thoroughly with water and detergents. Dispose of in accordance with local regulations.

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. Avoid high concentration of dust in air and accumulation of dust on equipment. Good personal hygiene procedures must be practiced.

Specific Conditions: Good local exhaust ventilation to control dust and reduce exposure to vapors.

Storage: Store in dry, cool, well-ventilated area. Protect from humidity. Product is combustible, keep away from heat and sources of ignition. Keep in original container and tightly closed when not in use. Keep product away from children, seeds, fertilizer, foods and animal feeds.
 Storage temperature: min. -10°C - max. 35°C.

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Engineering Measures: Ensure adequate ventilation to keep employee exposures below the Airborne Exposure Limits. 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: It is usually safe to not use a dust mask or respirator protection on account of this product. Use NIOSH/MSHA approved respiratory protection equipment if the product is being used in dusty or confined conditions

Skin Protection: Wear suitable protective clothing, including long sleeved shirt, long pants, gloves, coveralls, and boots to avoid skin contact.

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: Use PPE. Wash clothing before reusing.

9: PHYSICAL/CHEMICAL PROPERTIES

Appearance: Powder **Physical State:** Solid **Odour:** Characteristic odour **Solubility in Water:** Dispersible

Colour: White to off-white **pH:** approx. 4 - 6 (1% suspension) **Bulk Density [g/cc]:** 0.1 - 0.3

10: STABILITY & REACTIVITY

Stability: Stable under normal circumstances. **Conditions to Avoid:** High temperature, humidity, excessive heat (>35 °C) and ignition sources.

Hazardous Decomp. Products: On combustion or thermal decomposition, hydrogen sulfide/ chloride/ fluoride, carbon disulfide and oxides of carbon, nitrogen and sulfur compounds.

11: TOXICOLOGICAL INFORMATION

Clodinafop Propargyl:

Rat oral LD50 [mg/kg] : 1392 (male); 2271 (female)	Rat inhalation LC50 [mg/l/4h] : 2.325	Skin irritation (rabbit): Non-irritant
Dermal (rat) LD50 [mg/kg]: >2000	Skin Sensitization (Guinea Pig): May be a sensitizer	Eye irritation (rabbit): Non-irritant

Metsulfuron Methyl:

Rat oral LD50 [mg/kg] : >5000 (male & female)	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:

Clodinafop Propargyl:

Acute toxicity to Fish LC50 (96h) [mg/L] - for rainbow trout 0.39, carp 0.43, catfish 0.43 Daphnia LC50 (48h)[mg/L]: > 74

Metsulfuron Methyl:

Acute toxicity to Fish LC50 (96h) [mg/L] - for rainbow trout and bluegill sunfish >150 Daphnia LC50 (48h)[mg/L]: > 120

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.

Contaminated Packaging: Break, crush, or puncture and deliver empty packaging for appropriate disposal to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots, in compliance with relevant Local, State or Territory government regulations. Do not dispose of product or rinsing into sewage system or septic tanks.

14: TRANSPORT INFORMATION

UN No. 3077 **Proper Shipping Name:** Environmentally Hazardous Substance, solid, N.O.S

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): Not classified as dangerous good; Freight Class Bulk - Herbicide; Freight Class Package - Herbicide

15: REGULATORY INFORMATION

Hazard Symbol: Xi irritant

Risk Phrase: R36

Safety Phrase: S2, S13, S20/21, S22/23, S24/25, S29/35, S46

16: OTHER INFORMATION

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