

**1: IDENTIFICATION**

Chemical Name	Methyl 2-[3-(4-methoxy-6-methyl-1, 3, 5-triazin-2-yl) ureidosulphonyl] benzoate.		
Synonyms	Metsulfuron methyl 20% WP	Trade Name METRO	
Uses	Herbicide	Molecular Formula	C <sub>14</sub> H <sub>15</sub> N <sub>5</sub> O <sub>6</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)
Metsulfuron methyl A.I.	74223-64-6	20.00%
Fumed silica, crystalline-free	112945-52-5	3.00%
Other Ingredients	-	77.00%

**3: HAZARD IDENTIFICATION**

**Risk:** Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
Material and its container must be disposed of as hazardous waste.

**4: FIRST AID MEASURES**

**Signs and Symptoms of Exposure:** Irritation is the primary hazard; severe poisoning is unlikely unless a massive dose is consumed. When large amounts of sulfonylurea herbicides are ingested, the resulting signs can include lethargy, confusion, dizziness, seizures, and coma.  
**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 and give plenty of water to drink. Do not induce vomiting. Dilute by drinking milk. If not available drink water. If vomiting occurs, drink fluids again. 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. Administration of activated charcoal can be considered. Possible mucosal damage may contraindicate the use of gastric lavage. Treat symptomatically

**5: FIRE FIGHTING MEASURES**

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

**Unsuitable Extinguishing Media:** Heavy hose streams

**Specific Hazards:** Toxic and hazardous vapours may release. Approach fire from upwind to avoid breathing vapours.

**Hazardous Thermal (de)composition:** In the event of fire, toxic and noxious fumes of oxides of carbon, nitrogen or sulphur 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 fumes, Wear fire/flame resistant/retardant clothing. Do not enter fire area without proper protective equipment, including respiratory protection.

**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 allow runoff to enter drains and public waters. Notify the authorities if product enters.

**Methods for Cleaning-up:** Contain spill and absorb spilled material with absorbent material such as sand, clay or cat litter. Collect and transfer into waste disposal containers. Clean contaminated floors and objects thoroughly with water and detergents. Dispose of in accordance with local regulations. Spills in water should be contained as much as possible by isolation of the contaminated water. The contaminated water must be Collected and removed for treatment or disposal. Uncontrolled discharge into water courses must be alerted to the appropriate regulatory body

**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 in original container and tightly closed when not in use. Keep product away from children, seeds, fertilizer, foods and animal feeds.

## 8:EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering measures:** Ensure adequate ventilation. 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.

**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:** Wettable powder

**Physical State:** Solid

**Odour:** Faint, ester-like

**Explosivity:** Not explosive

**Colour:** Light brown

**pH:** 3 - 7 ( 1% dispersion in water)

**Solubility in water:** Dispersible

**Flash Point:** Not flammable

**Auto Ignition Temperature:** Not available

**Oxidizing Properties:** Not oxidizing

## 10:STABILITY & REACTIVITY

**Stability:** Stable under normal circumstances.

**Conditions to Avoid:** Source of Ignition

**Hazardous Decomp. Products:** On combustion or thermal decomposition, toxic and irritating fumes/vapors including oxides of carbon, nitrogen or sulphur may be released.

**Materials to avoid:** Strong oxidizing compounds and strong alkalis

## 11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg] : >5000

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

Skin irritation (rabbit): Mild-irritant

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

Skin Sensitization (Guinea Pig): Non-sensitizer

Eye irritation (rabbit): Mild-irritant

## 12: ECOLOGICAL INFORMATION

### Ecotoxicity:

Rainbow trout LC50 (96 hrs)[mg/L]: >150      Daphnia magna EC50(48 hrs) [mg/L]: > 120      Honey Bee LC50[µg/bee](oral): >44.3

**Bio-accumulation Potential:** Does not bioaccumulate. Bio concentration factor is < 1.

**Persistence, Degradability and Mobility in soil:** Moderately persistent in the environment; Degradable by chemical hydrolysis and by microbiological degradation

## 13: DISPOSAL CONSIDERATION

**Waste-disposal Procedures:** Material that cannot be reused or chemically reprocessed must be disposed of via controlled incineration (with gas scrubbing) or sent to a licensed destruction service. Do not contaminate drains, streams, rivers or waterways with the chemical or used container.

**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

## 14: TRANSPORT INFORMATION

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

**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

## 15: REGULATORY INFORMATION

**Hazard Symbol:** GHS09

**Phrase R:** R 51/53

**Phrase S:** S60/61

**Other:** To avoid risks to man and the environment, comply with the instructions of use

## 16: OTHER INFORMATION

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