

**1: IDENTIFICATION**

<b>Chemical Name</b>	2-chloro-1-(3-ethoxy-4-nitrophenoxy)-4-(trifluoromethyl) benzene		
<b>Synonyms</b>	Oxyfluorfen 23.5 % EC	<b>Trade Name</b>	OXIVIA
<b>Uses</b>	Herbicides	<b>Molecular Formula</b>	C <sub>15</sub> H <sub>11</sub> ClF <sub>3</sub> NO <sub>4</sub>
<b>Manufacturer/ Supplier</b>	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		
<b>Emergency Contact</b>	9503095030	<b>E-mail</b>	<a href="mailto:info@agrostar.in">info@agrostar.in</a>

**2: COMPOSITION/INFORMATION OF INGREDIENTS**

Chemical Name	CAS #	Percent or Content (w/w)
Oxyfluorfen	42874-03-3	23.50%
Other Ingredients	-	Q.S

**3: HAZARD IDENTIFICATION**

<b>Physical/ chemical Hazard:</b>	Classified as hazardous according to regulatory criteria
<b>Human Health Hazard:</b>	H302 Harmful if swallowed; H304 May be fatal if swallowed and enters airways; H320 Causes eye irritation H313 May be harmful in contact with skin; H316 Causes mild skin irritation H351 Suspected of causing cancer; H336 May cause drowsiness or dizziness; H373 May cause damage to organs through prolonged or repeated exposure.
<b>Environment Hazard:</b>	H411 Toxic to aquatic life with long lasting effects

**4: FIRST AID MEASURES**

**Important Symptoms and Effects:** 1) Skin contact: Mild irritation at the site of contact.

2) Eye contact: May be irritation and redness. The vision may become blurred.

3) Ingestion: May be soreness and redness of the mouth and throat.

**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:** Rinse mouth with water and give plenty of water to drink. 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, alcohol-resistant foam, dry chemical powder or carbon dioxide

**Specific Hazards:** The product may form flammable mixture. In combustion, it evolves toxic fumes of oxides of sulphur, nitrogen and carbon.

**Hazardous Thermal (de)composition:** Harmful and toxic vapours/gases including oxides of sulphur, nitrogen and carbon may release as combustion products

**Special Procedures:** Move containers away from area if it can be done without risk. If possible remove containers from fire zone, cool them with water spray. Minimize use of water to prevent environmental contamination. Dike and collect water used to fight fire to prevent environmental damage due to runoff. If area is not too heavily exposed to fire, and if conditions permit, let fire burn itself out, since water may increase the contamination hazard. Do not discharge extinguishing water into the drain or water bodies.

**Protection of Fire Fighters:** Do not enter fire areas without proper protective equipment, including respiratory protection. Use self-contained breathing apparatus when in close proximity to fire. If protective equipment is not available or not used, fight fire from a protected location or safe distance.

**6: ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Ventilate spillage area. Eliminate all sources of ignition. 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:** Clean up any spills as soon as possible, using an absorbent material such as sand, soil, diatomaceous earth etc. Collect and transfer into containers for disposal. Clean contaminated floors and objects thoroughly with water and detergents. Dispose of 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. 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

**Storage:** Store in dry, cool, well-ventilated area, away from heat, spark and open flame. Keep in original container and tightly closed when not in use. Keep out of reach of children

## 8: EXPOSURE CONTROL/PERSONAL PROTECTION

**Engineering Measures:** Ensure area is well-ventilated, especially confined area. Ensure lighting and electrical equipment are not a source of ignition. 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:** 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

<b>Appearance:</b> Liquid	<b>Specific Gravity [g/cc]:</b> 1.08	<b>Physical State:</b> Liquid
<b>Colour:</b> Clear brown	<b>Solubility in Water:</b> Emulsifiable	<b>Odour:</b> Not available

## 10: STABILITY & REACTIVITY

**Stability:** Stable for under normal circumstances.

**Hazardous Decomposition Products:** Harmful and toxic vapours/gasses including carbon monoxide, carbon dioxide, nitrogen oxides, chlorides may release.

**Conditions to Avoid:** Direct sunlight, sources of heat, open flame. Decomposes upon heating.

## 11: TOXICOLOGICAL INFORMATION

Rat oral LD50 [mg/kg]: 2985 - 4594	Rat inhalation LC50 [mg/l/4h]: > 4.8	Skin irritation (rabbit): Non-Irritant
Dermal (rat) LD50 [mg/kg]: > 4000	Skin Sensitization (Guinea Pig): Non-sensitizer	Eye irritation (rabbit): Mild irritant

## 12: ECOLOGICAL INFORMATION

### Ecotoxicity

**Effects in Birds:** Non toxic to birds

**Effects on Aquatic Organisms:** Very toxic to aquatic organisms.

Rainbow trout LC50 (96 hrs)[mg/L]: 1.1

Algae EC50(72 hrs) [mg/L]: 0.2

Earthworm LC50 (14 d)[mg/kg]: > 1000

**Bio-accumulation:** Low bioaccumulation potential

**Persistence, Degradability and Mobility in soil:** Half-life in soils is dependent on soil type and conditions and is approximately 6-15 days. Partially mobile in soil and low potential to leach below topsoil layer.

## 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:** 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.** 3082 **Proper Shipping Name:** Environmentally Hazardous Substance, liquid, n.o.s. (Oxyfluorfen 23.5% EC)

**Land Transport (ADR/RID):** Class-9, Packing Group-III

**Sea Transport (IMO/IMDG):** Class-9, Packing group-III, Marine Pollutant- Yes, EmS: F-A, S-F

**Air Transport (IATA/ICAO):** Class-9, Packing group-III

## 15: REGULATORY INFORMATION

**Hazard Symbol:** Xn – Harmful; N - Dangerous for the Environment

**Risk Phrases:** R22, R 51/53

**Safety Phrases:** S 35, S37

## 16: OTHER INFORMATION

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