

1: IDENTIFICATION

Chemical Name	Fomesafen: 5-[2-Chloro-4-(trifluoromethyl)phenoxy]-N-(methylsulfonyl)-2-nitrobenzamide Fluazifop-p-butyl : Butyl (2R)-2-[4-[5-(trifluoromethyl)pyridin-2-yl, oxyphenoxy]propanoate		
Synonyms	Fluazifop-p-butyl 11.1% w/w + Fomesafen 11.1% w/w SL	Trade Name	SLAYTOR
Uses	Herbicide	Molecular Formula	C ₁₅ H ₁₀ ClF ₃ N ₂ O ₆ S + C ₁₉ H ₂₀ F ₃ NO 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)
Fomesafen	72178-02-0	11.1%
fluazifop-P-butyl	79241-46-6	11.1 %

3: HAZARD IDENTIFICATION

Classification of the Substance or Mixture;	Classification according to Regulation (EU) 1272/2008 :	
	Reproductive toxicity Category 2 H361	Acute toxicity Category 4 H302
	Acute aquatic toxicity Category 1 H400	Chronic aquatic toxicity Category 1 H410
Label Elements :	Pictogram: GHS06, GHS07, GHS09	Signal Word: Warning
Hazard Statement:	H361d Suspected of damaging the unborn child. H302 Harmful if swallowed.	H410 Very toxic to aquatic life with long lasting effects.
Precautionary statement(s)	P102 Keep out of reach of children. P270 Do not eat, drink or smoke when using this product. P391 Collect spillage.	P281 Use personal protective equipment as required. P308 + P313 IF exposed or concerned: Get medical advice/ attention. P501 Dispose of contents/ container to an approved waste disposal plant.
Hazardous components which must be listed on the label: fluazifop-P-butyl		
Other Hazards: This product is for experimental uses only. The product has not been completely analysed and all of the hazards may not be known. Please use caution while handling this product.		

4: FIRST AID MEASURES

General: Consult a physician. Show this safety data sheet to the doctor in attendance.
Inhalation: Remove the victim to fresh air and keep him warm and quiet. Get a medical attention immediately. If not breathing, clear the airway and give artificial respiration. If breathing is difficult, give oxygen.
Ingestion: If swallowed, seek medical advice immediately and show this container or label. Do NOT induce vomiting.
Skin Contact: Take off all contaminated clothing immediately. Wash off immediately with plenty of water. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
Eye Contact: Rinse immediately with plenty of water. After 5 minutes remove contact lenses if present. Rinse again 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
Most important symptoms and effects, both acute and delayed : No information available.

5: FIRE FIGHTING MEASURES

Extinguishing Media: Extinguishing media - small fires :Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide. Extinguishing media - large fires: Alcohol-resistant foam or Water spray. Do not use a solid water stream as it may scatter and spread fire.
Special hazards arising from the substance or mixture: As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10). Exposure to decomposition products may be a hazard to health.
Special Procedures: Do not allow run-off from fire fighting to enter drains or water courses. Cool closed containers exposed to fire with water spray.
Protection of Fire Fighters: Wear self-contained breathing apparatus for firefighting if necessary..

6: ACCIDENTAL RELEASE MEASURES

Personal Precautions: Refer to protective measures listed in sections 7 and 8
Environmental Precaution: Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.
Methods for Cleaning up: Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). If the product contaminates rivers and lakes or drains inform respective authorities.

7: HANDLING & STORAGE

Handling: No special protective measures against fire required. Avoid contact with skin and eyes. When using do not eat, drink or smoke. For personal protection see section 8.
Specific end uses: Registered Crop Protection products: For proper and safe use of this product, please refer to the approval conditions laid down on the product label.
Storage: No special storage conditions required. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep out of the reach of children. Keep away from food, drink and animal feedingstuffs.

8: EXPOSURE CONTROL/PERSONAL PROTECTION

Control Parameters:	Fomesafen - Exposure limit(s): 2 mg/m ³ , Type of exposure limit: 8 h TWA fluazifop-P-butyl - Exposure limit(s): 0.5 mg/m ³ , Type of exposure limit: 8 h TWA
Engineering Measures: Containment and/or segregation is the most reliable technical protection measure if exposure cannot be eliminated. The extent of these protection measures depends on the actual risks in use. If airborne mists or vapors are generated, use local exhaust ventilation controls. Assess exposure and use any additional measures to keep airborne levels below any relevant exposure limit. Seek additional occupational hygiene advice.	
General Protection: The use of technical measures should always have priority over the use of personal protective equipment. When selecting personal protective equipment, seek appropriate professional advice. Personal protective equipment should be certified to appropriate standards.	

Personal Protection: Follow all precautions and instructions on the label. In all other cases the following recommendations would apply.

Respiratory Protection: A particulate filter respirator may be necessary until effective technical measures are installed. Protection provided by air-purifying respirators is limited. 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 should be used. Gloves should be certified to an appropriate standard. Gloves should have a minimum breakthrough time that is appropriate to the duration of exposure. The breakthrough time of gloves varies according to the thickness, material and manufacturer. Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough. Suitable material Nitrile rubber

Skin Protection: Assess the exposure and select chemical resistant clothing based on the potential for contact and the permeation / penetration characteristics of the clothing material. Wash with soap and water after removing protective clothing. Decontaminate clothing before re-use, or use disposable equipment (suits, aprons, sleeves, boots, etc.) Wear as appropriate: impervious protective suit.

Eye Protection: If eye contact is possible, use tight-fitting chemical safety goggles.

Control of Environmental Exposure : Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided

9:PHYSICAL/CHEMICAL PROPERTIES

Physical State: liquid **Colour:** light brown to dark brown **Density :** 1.075 g/ml
pH (1% aq. Sol.): No data available **Odour :** no data available

10:STABILITY & REACTIVITY

Stability: Stable for the period of two years, when stored under optimum conditions. **Reactivity:** No data available

Hazardous decomposition products: Combustion or thermal decomposition will evolve toxic and irritant vapors

Incompatible Materials: No information available.

Possibility of Hazardous Reactions: None known. Hazardous polymerisation does not occur.

Conditions to avoid: No information available.

11: TOXICOLOGICAL INFORMATION

Acute oral toxicity : rat, 650 mg/kg

Respiratory or skin sensitization: guinea pig: Not a skin sensitizer

Acute oral toxicity : rat, 650 mg/kg

Germ cell mutagenicity: fluazifop-P-butyl : Did not show mutagenic effects in animal experiments

Skin corrosion/irritation : Non-irritating

Carcinogenicity: fluazifop-P-butyl : Did not show carcinogenic effects in animal experiments.

Serious eye damage/eye irritation : Non-irritating

Teratogenicity: fluazifop-P-butyl : Did not show teratogenic effects in animal experiments.

Reproductive toxicity: fluazifop-P-butyl : Did not show reproductive toxicity effects in animal experiments

STOT - repeated exposure: fluazifop-P-butyl : No adverse effect has been observed in chronic toxicity tests.

12: ECOLOGICAL INFORMATION

Toxicity Toxicity to fish : no data available

Persistence and Degradability **Biodegradability**

fomesafen : Not readily biodegradable.

Stability in water

fomesafen : Degradation half life: > 1 y; Persistent in water.

fluazifop-P-butyl : Degradation half life: 1.5 - 1.7 h; Not persistent in water

Stability in soil

fomesafen : Degradation half life: 70 - 361 d; Fomesafen is persistent in soil.

fluazifop-P-butyl : Degradation half life: < 2 d; Not persistent in soil.

Bioaccumulative Potential

fomesafen : Does not bioaccumulate.

fluazifop-P-butyl : Does not bioaccumulate

Mobility in soil

fomesafen : Fomesafen has high mobility in soil

fluazifop-P-butyl : Fluazifop-p-butyl is immobile in soil.

Results of PBT and vPvB assessment

fluazifop-P-butyl : This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

This substance is not considered to be very persistent nor very bioaccumulating (vPvB).

Other adverse effects

None known.

13: DISPOSAL CONSIDERATION

Waste-disposal Procedures: Where possible recycling is preferred to disposal or incineration. It must undergo special treatment, e.g. at suitable disposal site, to comply with local regulations.

Contaminated packaging Disposal : Dispose of as unused product.

14: TRANSPORT INFORMATION

UN No. 3082

Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (FOMESAFEN AND FLUAZIFOP-P-BUTYL)

Land Transport (ADR/RID): Class-9, Packing Group-III, Environmental hazards - Yes

Sea Transport (IMO) (IMDG): Class-9, Packing group-III, Marine Pollutant-Yes

Air Transport (IATA): Class-9, Packing group-III, Environmental hazards -Yes

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not applicable

15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the substance or mixture

Pictogram: GHS06, GHS07, GHS09

Signal word : Warning

Hazard Statements: H361d, H361d, H410

Precautionary Statements: P102, P270, P281, P308 + P313, P391, P501

Hazardous components which must be listed on the label: fluazifop-P-butyl

Chemical Safety Assessment; A Chemical Safety Assessment is not required for this substance.

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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