



SHANGHAI BOSMAN INDUSTRIAL CO., LTD.

Add: Room 1804, No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

Tel: +86 21 63065878 | **Fax:** +86 21 63065878 | **E-mail:** info@bosmangroup.com

Website: www.bosmanagrochem.net

Version: 1.0 Issue date: Oct. 10, 2021

MATERIAL SAFETY DATA SHEET OF FLUAZIFOP-P-BUTYL 250 G/L EW

1. IDENTIFICATION OF THE CHEMICAL PRODUCT AND COMPANY

Supplier: Shanghai Bosman Industrial Co., Ltd.

Street address: No.1611, North Sichuan Road, Hongkou District, Shanghai, P.R. China.

FAX: +86 21 63065878

TEL: +86 21 63065878

Product name: Fluzifop-p-butyl 250g/l EW

2. COMPOSITION/INFORMATION ON INGREDIENTS

Formulation Type: Emulsion in Water (EW)

IUPAC: butyl (R)-2-[4-[[5-(trifluoromethyl)-2-pyridinyl]oxy]phenoxy]propanoate

Other ingredients determined not to be hazardous

Ingredient	CAS NO.	Proportion
Fluazifop-p-butyl	79241-46-6	250 g/l
other ingredients	Not available	Balance

3. HAZARDS IDENTIFICATION

Symptoms of Acute Exposure

Can cause eye, skin and respiratory passage irritation. Allergic reactions are possible. Harmful if inhaled or swallowed. Exposure to high vapor levels may cause headache, dizziness, numbness, nausea, incoordination, or other central nervous system effects.

Hazardous Decomposition Products

Mists from heated solution may cause respiratory irritation. Can decompose at high temperatures forming toxic gases.

Unusual Fire, Explosion and Reactivity Hazards

During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion.



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4. FIRST AID MEASURES

Ingestion: If swallowed do NOT induce vomiting. Rinse mouth with water and give water to drink.

If poisoning occurs, contact a Doctor or local Poisons center.

Eye contact: Immediately hold eyes open and flood with plenty of clean water. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained. If irritation occurs and persists, seek medical advice.

Skin contact: Immediately remove contaminated clothing and wash skin with soap and water. If skin irritation persists, seek medical advice.

Inhalation: Remove to fresh air and observe until recovered. If effects persist, seek medical advice.

Advice to Doctor: There is no specific antidote if this product is ingested. Treat symptomatically.

5. FIRE FIGHTING MEASURES

Extinguishing media: Extinguish fire using carbon dioxide, foam or dry agent. If not available, use waterfog or fine water spray but ensure all runoff is contained. Contain all runoff.

Hazards from combustion products: Sealed, overheated containers may present an explosion hazard. Thermal decomposition and burning will produce toxic by-products. Fire-fighters to wear self-contained breathing apparatus and suitable protective clothing if risk to of exposure to vapour or smoke.

Precautions for fire-fighters and special protective equipment: Isolate fire area. Evacuate downwind residents. Wear full protective clothing and self contained breathing apparatus. Do not breathe smoke or vapours generated. Avoid contamination with oxidising agents (i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc.) as ignition may result.

6. ACCIDENT RELEASE MEASURES

Emergence procedures / Material and methods for containment and cleanup procedures:

Accidental release: In the event of a major spill, prevent spillage from entering drains or water courses. As a minimum, wear neck and wrist and a washable hat, elbow length PVC gloves, face shield or goggles. If there is a significant chance that vapours or mists are likely to build up in the cleanup area, the use of a respirator is recommended. Eliminate all sources of ignition.

In the case of spillage, stop leak if safe to do so, and contain spill. Absorb spilled material with absorbent material such as sand, clay or cat litter and dispose of waste as local requirement. Wear prescribed



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protective clothing and equipment (see Section 8). Keep out animals and unprotected persons.

After spills, wash area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services. Thoroughly launder protective clothing before storage or re-use.

7. HANDLING AND STORAGE

Store the material in a well-ventilated, secure area out of reach of children and domestic animals. Do not store food, beverages or tobacco products in the storage area. Prevent eating, drinking, tobacco use, and cosmetic application in areas where there is a potential for exposure to the material. Wash thoroughly with soap and water after handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Control parameters

Exposure Limits This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Derived No Effect Level (DNEL) No information available

Predicted No Effect Concentration (PNEC) No information available.

Engineering Controls:

Use adequate exhaust ventilation to prevent inhalation of product vapours, mist or dust.

Personal Protective Equipment:

Respiratory protection: Wear dual cartridge respirator for dusts and mists if local ventilation is inadequate.

Skin Protection: Wear butyl, natural, nitrile or neoprene rubber gloves and coveralls over long-sleeve shirt and long pants and chemical resistant apron to prevent repeated or prolonged contact with the skin.

Eye protection: Chemical goggles and a full face shield to prevent contact with face and eyes.

9. PHYSICAL AND CHEMICAL PROPERTIES

Form : Liquid

Appearance : Tan to red brown colour

Odour : NA

Explosion Properties : Not explosive

pH : 4.0-9.0



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Solubility : Emulsifiable in water

10. STABILITY AND REACTIVITY

Chemical Stability: Product is considered stable in ambient conditions.

Conditions to avoid: Store in the closed original container in a cool, well ventilated area. Do not store for prolonged periods in direct sunlight.

Incompatible materials: Avoid strong oxidising agents and strong acids or bases.

Hazardous decomposition products: Heating may cause expansion or decomposition leading to violent rupture of containers. Carbon dioxide, and if combustion is incomplete, carbon monoxide and smoke and other toxic gases.

Hazardous reactions: Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result. Polymerisation is unlikely.

11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Oral Acute oral LD₅₀ for male rats 3680, female rats 2451 mg/kg.

Skin and eye Acute percutaneous LD₅₀ for rabbits >2000 mg/kg.

Not a skin or eye irritant (rabbits).

Not a skin sensitiser (guinea pigs).

Inhalation LC₅₀ (4 h) for rats >5200 mg/l.

Chronic toxicity:

NOAEL (2 y) for rats 0.47 mg/kg b.w. daily; (91 d) for dogs 25 mg/kg b.w. daily; (90 d) for rats 9.0 mg/kg b.w. daily. Multi-generation study (rats) 0.9 mg/kg b.w. daily.

12. ECOLOGICAL INFORMATION

Birds Acute oral LD₅₀ for mallard ducks >3500 mg/kg. Fish LC₅₀ (96 h) for rainbow trout 1.3 mg/l.

Daphnia EC₅₀ (48 h) >1.0 mg/l.

Algae EbC₅₀ (72 h) for *Navicula pelliculosa* 0.51 mg/l.

Other aquatic spp. EC₅₀ (14 d) for *Lemna gibba* >1.4 mg/l.

Bees Very low toxicity to bees. LD₅₀ (oral and contact) >0.2 mg/bee.

Worms LC₅₀ >1000 mg/kg.



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13. DISPOSAL CONSIDERATION

Product Disposal: Dispose of product only by using according to the label, or at an approved landfill.

Container Disposal: Plastic containers: Triple rinse (or equivalent). Then offer for recycling or reconditioning, or puncture and dispose of in a sanitary landfill, or incineration, or, if allowed by state and local authorities, by burning. If burned, stay out of resulting smoke

14. TRANSPORT INFORMATION

ADR/RID

U.N. Number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
(Fluazifop-P-butyl).

UN classification: 9

Packing Group III

IMDG

U.N. Number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
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UN classification: 9

Packing Group III

IATA

U.N. Number 3082

UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
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UN classification: 9

Packing Group III

15. REGULATORY INFORMATION

Follow all local, national, international degree, regulations and laws.



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16. OTHER INFORMATION

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This MSDS summarizes our best knowledge of the health and safety hazard information of the product and how to safely handle and use the product in the workplace. Each user should read this MSDS and consider the information in the context of the how the product will be handled and used in the workplace including in conjunction with other products.

If clarification or further information is needed to ensure that an appropriate risk assessment can be made the user should contact the company.

-- END OF MSDS --