

PRODUCT SAFETY DATA SHEET

SUBSTANCE / PREPARATION NAME

FUDO

Date of preparation	27/07/2015
Release Date	27/07/2015
MSDS No	FORM_MSDS_R&D_217_00
Renewal Date/No	

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TE This form is based on SAFETY DATA FORMS AND REGULATION ABOUT THE PREPARATION AND DISTRIBUTION OF HAZARDOUS SUBSTANCES (dated 26/12/2008 and 27092 numbered).

1. SUBSTANCE/PREPARATION AND COMPANY/ DEFINITION OF BUSINESS OWNER

1.1 Substance/ Presentation Of The Preparation:

Product Name : **FUDO**
Product Description : Fluazifop-P-butyl 150 g/L
Formulation Type : EC (Emulsion Concentrate)

Fluazifop-P-butyl

CAS No : 79241-46-6
HRAC : Aryloxyphenoxypropionate

1.2 Usage of Substance/Preparation:

HERBICIDE

1.3 Presentation of the Company:

Manufacturer and Licensee Company:

Company Name : AGRİ SCIENCES TARIM VE İLAÇ ÜR. SAN. TİC. LTD. ŞTİ.
Adress : Bekir Saydam Caddesi Pancar No: 31 Torbalı / İZMİR
Telephone : +90 0232 864 13 33
Fax : +90 0232 864 16 79

1.4 Emergency Telephone:

Please call +90 0232 864 13 33 and /or National Poisoning Information Centre 114 in an emergency.

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2. INFORMATION ABOUT THE CENTENT / COMPOSITION

Substance	g/L	CAS No	EINECS/ELINCS	Hazard	R ¹	Classification
Fluazifop-P-butyl	150	79241-46-6	-	Xn, N	R50/53, R63	Xn;R63 N;R50/53
Xylene	664.24	1330-20-7	215-535-7	Xn, Xi	R10, R20/21, R38	R10 Xn;R20/21- R38
Others	These are excluded because of not containing hazardous substance.					

- Descriptions about ¹R are given in chapter 16.

3. IDENTIFICATION OF HAZARDS



Xn: Harmful



N: Dangerous For the Environment

R10 : Flammable.
 R20/21 : Harmful, if inhaled and contact with skin.
 R38 : Irritating the skin.
 R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

4. FIRST AID MEASURES

Symptoms of Poisoning: There are not any specific symptom. General symptoms are; initially nausea, vomiting, stomachache and diarrhea. It can cause to skin and eye irritation when contacted with drug.

First Aid Measures: If it is contacted with eye, flush eyelids slowly for 10 - 15 minutes. If necessary, consult to a doctor with medication. If the patient swallowed, vomiting the

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patient. Stomach should be washed, by paying attention to not to escape the stomach contents into the respiratory tract.

Antidote and Required Information: There is no a special antidote. Supportive treatment according to symptoms.

5. FIRE CONFLICT MEASURES

Required Personal Protective Equipment in Aid: Do not breathe fumes of explosion and fire. If possible, use self-contained breathing apparatus during fire.

Hazards: Formation of dangerous gases is taken into account in case of fire.

Fire Extinguishers: Foam, carbon dioxide, extinguishing powder.

Other Information: Remove the product from fire areas, cool containers with water. If possible, use sand or earth after fire-fighting water.

6. ACCIDENTAL RELEASE MEASURES

General Information: Use personal protection devices, specified in section 8.

Personal Alerts: Avoid contact with spilled product or contaminated areas. Do not eat, drink or smoke when dealing with spilled product.

The Cleaning Process: The product is collected with liquid retaining material (such as peat, sawdust, chemical binder. Substance collected into hard plastic containers and stored in a secure way until to destroy. Contaminated substances, cleaned according to environment and ground instructions. The product flowing to drains or sewers is blocked. If waste is mixed with water, it is reported to the authorities.

Additional Precautions: Look at section 7 for safe use. Look at section 8 for personal protective equipment. Look at section 13 for disposal.

7. HANDLING AND STORAGE

Handling: Use personal protective equipment specified in section 8. Do not eat or drink anything during the usage. Avoid contact with skin and eyes. Do not breathe it. Wash your hands after usage. It does not need any other security precautions other than instructions on it. Use only the rooms with appropriate exhaust ventilation.

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Storage: Store in original container in a cool, dry and well-ventilated place. Keep away from foods, drinks and animal feedstuffs. Protect from direct sunlight. Protect against freezing, do not put to reach area of children.

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION

Engineering Precautions: Keep the substance concentration below the allowable limits by providing the appropriate general or regional ventilation.

Personal Protective Equipment:

Eye : Use safety glasses according to EN 166.

Skin : Use protective clothing and suitable gloves. If possible, use 2 layers of clothing. Use CE marked Nitrile rubber gloves (min 0,40 mm thick). Wash contaminated gloves. Dispose of the not cleanable gloves.

Respiration: Use breathing apparatus according to EN 149:2001. Breathing apparatus only used in short-term works to reduce the risk, for example, in local ventilations. Warning instructions prepared by manufacturers about respiratory protection apparatus must be followed.

Hygiene Precautions: Do not eat, drink or smoke during usage. Wash your hands every time before going to the toilet, eating, drinking and smoking.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : Liquid, clear
Color : Yellow
Odor : Aromatic
Density : $0,928 \pm 0,05 \text{ g/cm}^3$ (20°C)
pH : 4 ± 1 10% (20°C)
Flash Point : 28 ± 5 °C.

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10. STABILITY AND REACTION

Conditions to avoid : Extreme temperatures and direct sunlight.

Substances to avoid : Avoid from strong oxidizing.

Hazardous reactions : There is not hazardous reactions when stored and handled suitable. Resistant to storage conditions. Hazardous polymerization products does not occur.

11. TOXICOLOGICAL INFORMATION

Fluazifop-P-butyl Technical Substance:

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

Skin and eye Acute percutaneous LD₅₀ for rabbits >2000 mg/kg. Slight skin and mild eye irritant (rabbits). Not a skin sensitiser (guinea pigs).

Inhalation LC₅₀ (4 h) for rats >6.06 mg/l.

NOEL NOAEL (2 y) for rats 1.0 mg/kg b.w. daily (10 mg/kg diet); (1 y) for dogs 25 mg/kg b.w. daily; (90 d) for rats 9.0 mg/kg b.w. daily (100 mg/kg diet). Multi-generation study (rats) 0.9 mg/kg b.w. daily (10 mg/kg diet); developmental toxicity for rat 5 mg/kg b.w. daily, for rabbit 30 mg/kg b.w. daily.

ADI/RfD (BfR) 0.01 mg/kg b.w. [2001]; (EPA) aRfD 0.5, cRfD 0.0074 mg/kg b.w. [2005].

Other Not genotoxic.

12. ECOLOGICAL INFORMATION

Fluazifop-P-butyl Technical Substance:

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 E_bC₅₀ (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 INFORMATION

Product: Wastes should be disposed of with household waste. The remaining amount of waste must not be poured into a sewage canal. Hazardous waste should be disposed of according to control regulations.

Contaminated Packing: Empty containers should be used for other products. Completely emptied and shaken containers must be properly disposed. Uncontaminated packaging should be disposed of as hazardous waste.

14. TRANSPORT INFORMATION

ADR/RID/ADNR

UN-No. : 2903

Hazard Signal : 6.1

Packaging Group : III

Description of the goods: UN 2903 PESTICIDE, LIQUID, TOXIC, FLAMMABLE N.O.S (Containing Fluazifop-p-butyl and Xylene.)

UN-No. : 2903

Class : 6.1

Packaging Group : III

EMS :

Marine Pollutant : Yes

Description of the goods: UN 2903 PESTICIDE, LIQUID, TOXIC, FLAMMABLE N.O.S (Containing Fluazifop-p-butyl and Xylene.)

IATA

UN-No. : 2903

Class : 6.1

Packaging Group : III

EMS :

Marine Pollutant : Yes

Description of the goods: UN 2903 PESTICIDE, LIQUID, TOXIC, FLAMMABLE N.O.S (Containing Fluazifop-p-butyl and Xylene.)

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15. REGULATORY INFORMATION

This form is based on SAFETY DATA FORMS AND REGULATION ABOUT THE PREPARATION AND DISTRIBUTION OF HAZARDOUS SUBSTANCES (dated 26/12/2008 and 27092 numbered).

Hazard Signal and Symbol:



Xn: Harmful



N: Dangerous for the Environment

Hazardous Substances Found On the Label

Contains Fluazifop-p-buthyl and Xylene.

Risk Phrases

Physicochemical:

R10 : Flammable.

Health:

R20/21 : Harmful, if inhaled and contact with skin.

R38 : Irritating the skin.

Environment:

R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment

Safety Phrases:

S1/2 : Keep away from children and store under lock.

S9 : Keep container in a well-ventilated place.

S13 : Keep away from foods, drinks and animal feedstuffs

S 36/37/39 : Use suitable protective clothing, gloves and protective goggles/mask.

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- S43 : Use carbon dioxide, fire extinguish powder, foam in case of exacerbation.
- S46 : If swallowed, seek medical advice immediately, show the container or label.
- S56 : Dispose of this material and its container at hazardous or special waste collection point
- S64 : If swallow, rinse mouth with water (Only if the person is conscious).

Important Labelling:

To avoid from risks to man and environment, comply with the instruction of use.

16. OTHER INFORMATIONS

- Xi** : Irritant
- Xn** : Harmful
- N** : Dangerous for the environment

All Risk phrases mentioned in Section 2:

- R10 : Flammable.
- R20/21 : Harmful, if inhaled and contact with skin.
- R38 : Irritating the skin.
- R50/53 : Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R51/53 : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
- R63 : Possible risk of harm to the unborn child

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Date of Renewal/No :-
Prepared By : Remzican KARAN

This security information form is additional to manufacturer firm's instructions, however does not replace with instructions. This form contains regulation criteria for preparation of security form preparation. This form is based on safety data forms and regulation about the preparation and distribution of hazardous substances (dated 26/12/2008 and 27092 numbered). Please, the relevant institutions and individuals act according to this regulation.