# with us you are growing goodness



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**REG NO:** 2000/010819/07 **VAT NO:** 4120189206

# **Safety Data Sheet**

FLUZIE - Reg. No: L 9460 (Act No 36 of 1947)

Date of issue: 06/05/2013 Date of revision: 26/6/2019

1) IDENTIFICATION OF THE SUBSTANCE OR MIXTURE AND OF THE SUPPLIER.		
Product name:	FLUZIE	
Other means of identification:	Fluazifop-p-butyl 125 g/L	
UN number:	1993	
Recommended use:	Herbicide	
Restrictions on use:	Agriculture	
Distributed by:	MERIDIAN AGRITECH P O BOX 436 MODDERFONTEIN TEL 011 8228509 FAX 0866901386 MOBILE: 0834006056 www.agritech.co.za	
Emergency Number:	POISON CENTRE (UNITAS HOSPITAL) 012 664 1100 WESTERN CAPE POISONS TELEPHONE SERVICE 0861 555 777 RAPID SPILL RESPONSE 0800 775 3305 GRIFFON POISON CENTRE: 082 446 8946	
Chemical Name:	Butyl(RS)-2-[4-[5—trifluoromethyl)-2- pyrinyl]phenoxyl]propanoate	
2) Classification of the substance / mixture:		
Classification of the product:	Xn; N;R38; R43;R50/53; R63: . Full text of R-phrases; see section 15	
Label elements:	Hazard statement(s): H361d: Suspected of damaging the unborn child. H315: Causes skin irritation. H317: May cause an allergic skin reaction. 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. P280; Wear protective gloves/ protective clothing. P302 + P352: IF ON SKIN: Wash with plenty of soap and water. P391: Collect spillage.	
	P501; Dispose of contents/ container to an approved waste disposal plant.  Pictogram:  Signal Word: Warning	
Health effects: eyes:	May cause irritation.	

Health effects: skin:	May cause irritation.
Health effects: ingestion	Single dose oral toxicity considered to be low
Health effects: inhalation	May be harmful
Health effects: Other	Suspected of damaging the unborn child.

# 3) COMPOSITION / INFORMATION ON INGREDIENTS:

# Mixture:

Chemical name	Composition	CAS No.	EC No.	Classification according to Regulation EC 1272/2008 (CLP)	Classification according to 67/548/EEC
Fluazifop-p-butyl	12.5 %	79241-46-6	607-305-00- 3	Flam liq Cat. 3, H226 Rep toxi Cat.2, H361d	Xn, N R63 R50/53
				Acute aquatic toxi. Cat. 1, H400 Chronic aquatic tox. Cat 1, H410	
Inerts	87.5%			Oat 1, 11710	

Full text of R- and S-phrases: see section 15.

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4) First Aid Measures:	
Eye contact:	Flush eyes with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance.
Skin contact:	Immediately flush body and clothes with large amounts of water. Remove contaminated clothing and footwear. Wash affected areas with soap and water. Do not rub skin. Seek medical assistance should irritation persist.
Ingestion:	Never give anything by mouth to an unconscious person. If swallowed do NOT induce vomiting. One or two glasses of water may be given. For advice, contact the National Poisons Centre.
	Seek medical assistance immediately.
Inhalation:	Remove patient to fresh air. Lie down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation.
	Seek medical assistance.
Most important symptoms and effects, acute and delayed:	
Indication of immediate medical attention and special treatment needed: Advice to physician	No specific antidote is available Treat symptomatically and supportively. when considering emptying the stomach.
5) Fire-Fighting Measures:	
Suitable extinguishing media:	Alcohol-resistant foam, carbon dioxide, dry powder, water

Alcohol-resistant foam, carbon dioxide, dry powder, water mist or fog (do not use a water jet as it may scatter and Suitable extinguishing media: spread the fire) or halon extinguishant. Unsuitable extinguishing media: No information available

Special hazards arising from the substance or mixture:

This product may generate poisonous, explosive and corrosive fumes (carbon monoxide and nitrous gases) Keep upwind.

# Fire-fighting: Remove spectators from surrounding area. Isolate the fire area and evacuate downwind. Use a recommended extinguishing agent for the type of surrounding fire. Fight fire from maximum distance and use unmanned hose holder or monitor nozzles. Contain fire control agents for later disposal. Generating poisonous and corrosive fumes. Keep upwind. Avoid inhaling hazardous vapours and fumes from burning materials. Keep upwind. Remove container from fire area if possible and without risk. Water can be used to cool unaffected containers but must be contained for later disposal.. Do not scatter the material. Bund area with sand or earth to avoid pollution of waterways. Water can be used to cool containers. Dispose of extinguishing agent and spillage in a safe way at a later stage. Prevent use of contaminated buildings, area, and equipment until decontaminated. Water runoff can cause environmental damage. Contain run-off water with, for example, temporary earth barriers. The product will burn vigorously with flames and can be a fire hazard. During a fire, irritating and possibly toxic gases may be generated by thermal decomposition or combustion. Flash back is possible over a considerable distance Protective clothing: Full protective clothing and self-contained breathing apparatus 6) Accidental Release Measures: Personal precautions: Do not inhale vapour or spray. Avoid contact with skin and eyes. For personal protection see section 8. **Environmental precautions:** Do not contaminate waterways, drains and groundwater. If contamination of waterways, drains, rivers or lakes is unavoidable, warn the local authorities (Police and Department of Water/Environmental affairs) immediately. Wear protective clothing. Clear area of unprotected Cleaning procedure: personnel. Contain and absorb liquid spills with inert material and place in waste containers. Wash area with water containing soda or detergent and absorb with further inert material. If spill does enter waterways contact the local authority. Heavily contaminated soil layers should be removed and disposed of in an approved way. Spilled product cannot be re-used and must be disposed of by incineration or disposal in a chemical waste disposal facility. If containers cannot be recycled, they should be disposed of together with the waste chemical Disposal: **Waste Disposal:** In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. **Container Disposal:** Refer to the product label for instructions. If the container is to be refilled, do not rinse with any material or introduce any pesticide other than this product. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE.

7) Handling & Storage:

Do not transport if this container is damaged or leaking.

Handling:	Avoid skin and eye contact and inhalation of spray mist. Keep away from heat and sources of ignition. Ensure adequate ventilation.
	Wash hands before breaks and immediately after handling the product. When using, do not eat, drink or smoke. Wash contaminated clothing before re-use.
	APPROVED HANDLER: This product must be under the control of an approved handler when applied in a wide dispersive manner; or used by a commercial contractor. BEWARE: Spray drift hazard. Apply this product carefully. Spray drift may cause serious damage to other desirable plants.
Storage:	Keep out of reach of children and animals.
	Store in original container only in a well-ventilated, cool, dry, secure area. Protect from heat, sparks and flame. Do not expose containers to temperatures above 40 °C. Keep separate from other products to prevent cross contamination.
	Keep away from heat and sources of ignition.
	Keep away from combustible material.
	Store in an area equipped with sprinklers.
8) Exposure Control / Personal Protection:	T
It is essential to provide adequate ventilation. The measures appropriate for a particular work site depend on how this material is used and on the extent of exposure. Ensure that control systems are properly designed and maintained. Comply with occupational safety, environmental, fire, and other applicable regulations.	Containment and/or segregation is the most reliable technical protection measure if the exposure cannot be eliminated. The extent of the use of these protection measures depends on the risks in use. If airborne mists or vapours are generated, local exhaust ventilation controls must be used. Assess the exposure risk and use any additional measures to keep airborne levels below any relevant exposure limit. When necessary, seek additional occupational hygiene advice.
	The use of technical measures has priority over the use of personal protective equipment. When choosing personal protective equipment, seek the appropriate professional advice. Personal protective equipment must be certified to the appropriate standards.
PERSONAL PROTECTIVE EQUIPMENT:	
Clothing:	Employee must wear appropriate protective (impervious) clothing and equipment to prevent repeated or prolonged skin contact with this substance.
Gloves:	Suitable chemically resistant (such as nitrile or butyl) gloves, with prolonged, direct contact. (Recommended: Protective index 6, corresponding to >480 minutes of permeation time according to EN 374) e.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc.
Eye protection:	The use of safety goggles with side shields is recommended.
Respiratory protection:	Wear respirator if ventilation is inadequate or exposure to high levels are likely
Emergency eye wash:	Where there is any possibility that an employee's eyes may be exposed to this substance, the employer should provide an eye wash fountain or appropriate alternative within the immediate work area for emergency use.

9) Physical & Chemical Properties:

Form: Liquid
Colour: Amber

Odour: Characteristics
Odour threshold: No data available

**pH:** 4.9-5.05

Melting point / Freezing pointNo data availableInitial boiling point and boiling rangeNo data available

Flash point: 40.6 °C

Evaporation rate: No data available

Flammability (solid, gas) Flammable

Upper/ lower flammability or explosive limits:No data availableVapour pressure:No data availableVapour density:No data available

Relative density:  $\pm 0.93 \text{ g/L}$ 

Solubility(ies)

Miscible in water

Partition coefficient: n-octanol/water

Auto-ignition temperature:

Viscosity:

Miscible in water

No data available

No data available

# 10) Stability & Reactivity:

Reactivity:

No hazardous reactions if stored and handled as indicated /

prescribed.

**Chemical stability:**When stored appropriately this product should show no significant degradation for 2 years from the date of

manufacture. Thermally and chemically stable.

Hazardous decomposition product(s):

No hazardous reactions decomposition if stored and

handled as indicated.

Conditions to avoid: Segregate from food and animal feeds. Keep away from

heat and protect from direct sunlight. Avoid storage at temperatures above 35 °C. Avoid extremes of temperature.

**Incompatible materials:** Avoid strong bases, strong acids and strong oxidizing

agents.

# 11) Toxicological Information:

Acute:

Oral LD50 > 2 00mg/kg, rat

Dermal LD50 > 2 000 mg/kg, rat

Inhalation LC50 (4h): for rats >5.24 mg/l. (Fluazifop-p-butyl technical material)

Skin irritation : Irritant, rabbit

Eye irritation : Irritation, rabbit

Sensitisation : No data available

Other :

#### Repeated dose toxicity:

The statement has been derived from the properties of the individual components. Tests revealed no substance-specific organ toxicity after repeated administration to animals.

#### Mutagenicity:

The statement has been derived from the properties of the individual components. Tests revealed no genotoxic potential.

#### Carcinogenicity:

The statement has been derived from the properties of the individual components. Tests revealed no indication of a carcinogenic effect.

#### Reproductive toxicity:

The statement has been derived from the properties of the individual components. Tests revealed no indication of a fertility impairing effect.

#### Teratogencity:

The statement has been derived from the properties of the individual components. Tests revealed no indication of developmental toxic effects at dosage rates that were not toxic to the parent animals.

# 12) Ecological Information:

#### Information below based on active ingredient: Fluazifop-p-butyl technical material

Bees: LD<sub>50</sub> veryLow toxicity

Birds: LD<sub>50</sub> (oral) Mallard ducks >17 000 mg/kg. LC<sub>50</sub> (5 d) (Dietary): Mallard ducks >25 000, ring-necked pheasants >18

500 mg/kg diet.

Fish: LC<sub>50</sub> (96 h) for rainbow trout 1.37, mirror carp 1.31, bluegill sunfish 0.53 mg/L. Daphnia: LC<sub>50</sub> (24 h) >316 ppm.

Algae : Worms:

Other aquatic species: Low toxicity to aquatic invertebrates.

#### **Environments fate**

### Persistence and degradability:

In soil, rapid degradation of fluazifop-butyl occurs, DT50 <1 w. The major degradation product is fluazifop, which has  $DT_{50}$  in soil <3 w. Persistence in soil is lengthened by cold and dry conditions.

Fluazifop-p-butyl does not bioaccumulate, is not persistent in water or soil and is immobile in soil. her adverse effects:

### 13) Disposal Considerations:

**Waste Disposal:** In accordance with local and national regulations. Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities. Do not contaminate water, food or feed by disposal. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Refer to the product label for instructions. Triple rinse empty containers before disposal in the following manner: Invert the container over the spray or mixing tank and allow to drain for at least 30 seconds after the flow has slowed to a drip. Thereafter, rinse the container three times with a volume of water equal to a third of that of the container volume. Add rinsing to the contents of the spray tank before destroying the container in the prescribed manner. Empty containers should not be burnt; puncture and flatten containers and dispose at a licensed landfill site according to local regulations. If no landfill is available, bury the containers below 500 mm in a disposal pit specifically marked and set up for this purpose clear of waterways, desirable vegetation and tree roots. Prevent contamination of water sources, food or feed by disposal. DO NO REUSE THE CONTAINER FOR ANY OTHER PURPOSE. If recycling, replace cap and take containers to the designated recycling point. If containers cannot be recycled, they should be disposed of together with the waste chemical according to local regulations.

# 14) Transportation Information:

UN Number: 1993

Road transport ADR/RID

Class: 3 Flammable liquids

Packing group: III

Shipping name: FLAMMABLE LIQUIDS, N.O.S. (AROMATIC HYDROCARBONS AND FLUAZIFOP-P-BUTYL)

Maritime transport IMDG/IMO

Environmental hazards: Marine pollutant: Yes

Class: 3 Flammable liquids

Packing group: III

Shipping name: FLAMMABLE LIQUIDS, N.O.S. (AROMATIC HYDROCARBONS AND FLUAZIFOP-P-BUTYL)

Air transport IATA-DGR

Road Transport ADR/ RID: Class: 3 Flammable liquids

Packaging group: III

Shipping name: FLAMMABLE LIQUIDS, N.O.S. (AROMATIC HYDROCARBONS AND FLUAZIFOP-P-BUTYL)

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC code): NA

# 15) Regulatory Information:

Contains: Fluazifop-*P*-butyl

Symbols: Xn – Harmful

N - Dangerous for the environment





# Risk - Phrase(s):

R22 - Harmful if swallowed.

R37 - Irritating to respiratory system.

R41 - Risk of serious damage to eyes.

R63 - Possible risk of harm to the unborn child.

R65 - Harmful: may cause lung damage if swallowed.

R67 - Vapors may cause drowsiness and dizziness.

R50/53 - Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

# Safety - Phrase(s):

S 2 - Keep out of the reach of children.

S13 - Keep away from food, drink and animal feedingstuffs .

S20/21 - When using do not eat, drink or smoke.

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S35 - This material and its container must be disposed of in a safe way.

S36/37/39:- Wear suitable protective clothing, gloves and eye/face protection.

S57 - Use appropriate container to avoid environmental contamination.

S62 - If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.

#### Hazard - phrase(s)

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H361d Suspected of damaging the unborn child.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

#### 16.Other Information

All information and instructions provided in this Safety Data Sheet (SDS) are based on the current state of scientific and technical knowledge at the date indicated on the present SDS and are presented in good faith and believed to be correct. This information applies to the product as such. In case of new formulations or mixes, it is necessary to ascertain that a new danger will not appear.

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