according to WHS Regulations

Printing date 09.09.2020 Revision: 09.09.2020

1 Identification

Product Name: RELYON FLUAZIFOP POST-EMERGENCE SELECTIVE HERBICIDE

Other Means of Identification: Mixture

Recommended Use of the Chemical and Restriction on Use: Agricultural herbicide

Details of Manufacturer or Importer:

Nutrien Ag Solutions Limited

Level 5, Building A 26 Talavera Road

Macquarie Park NSW 2113

Phone Number: (02) 9889 5400

Emergency telephone number: 1800 44 88 92

2 Hazard(s) Identification

Hazardous Nature:

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Not classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



Toxic To Reproduction 2 H361 Suspected of damaging fertility or the unborn child. Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.

environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

Flammable Liquids 4 H227 Combustible liquid.

Signal Word Danger

Hazard Statements

H227 Combustible liquid.

H361 Suspected of damaging fertility or the unborn child.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P210 Keep away from flames and hot surfaces. No smoking.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P331 Do NOT induce vomiting.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P370+P378 In case of fire: Use for extinction: CO2, powder or water spray.

P391 Collect spillage.

P403+P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

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P501 Dispose of contents/container in accordance with local/regional/national regulations.

3 Composition and Information on Ingredients

Chemical Characterization: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Components:		
	Solvent naphtha (petroleum), heavy arom.	68.5%
	♦ Aspiration Hazard 1, H304	
CAS: 79241-46-6	Fluazifop-P-butyl (ISO)	21.2%
	♦ Toxic To Reproduction 2, H361; ♦ Aquatic Chronic 1, H410	

4 First Aid Measures

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Seek medical attention if breathing problems develop.

Skin Contact:

In case of skin contact, immediately remove contaminated clothing and wash affected areas with water and soap. Seek medical attention if symptoms occur.

Eye Contact:

In case of eye contact, hold eyelids open and rinse with water for at least 15 minutes. Seek medical attention if symptoms occur.

Ingestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Do not give anything by mouth to an unconscious person. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause mild irritation.

Skin Contact: May cause skin irritation, itchiness and reddening. Eye Contact: May cause eye irritation, stinging and reddening. Ingestion: May be fatal if swallowed and enters airways.

5 Fire Fighting Measures

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon, nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, hydrogen fluoride, other fluorine compounds, smoke and water. Product is combustible.

Closed containers may explode when exposed to extreme heat. Containers close to fire should be removed if safe to do so. Use water spray to cool fire exposed containers.

Special Protective Equipment and Precautions for Fire Fighters:

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

6 Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation. Extinguish all sources of ignition. Avoid sparks and open flames. No smoking.

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Environmental Precautions:

In the event of a major spill, prevent spillage from entering drains or water courses.

Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. If absorbent material is not available or spill is too large, create a dike to stop spill from spreading. Collect the spilled material and place into a suitable container for disposal.

7 Handling and Storage

Precautions for Safe Handling:

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Conditions for Safe Storage:

Store in a cool, dry and well ventilated area. Keep in original container, tightly closed when not in use. Heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents.

8 Exposure Controls and Personal Protection

Exposure Standards:

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection:

Use an approved vapour respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentrations of mist or vapour, inadequate ventilation, development of respiratory tract irritation) and engineering controls are not feasible. See Australian Standards AS/NZS 1715 and 1716 for more information.

Skin Protection:

PVC or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

Eye and Face Protection:

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

9 Physical and Chemical Properties

Appearance:

Form: Liquid

Colour:Clear, dark amber colouredOdour:Characteristic hydrocarbon odour

Odour Threshold:

pH-Value:

No information available
No information available
No information available
No information available

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Initial Boiling Point/Boiling Range: 230-280 °C (at 100 kPa)

Flash Point: 70 °C
Flammability: Combustible
Auto-ignition Temperature: 260 °C

Decomposition Temperature: No information available

Explosion Limits:

Lower: 0.6 Vol % **Upper:** 7.0 Vol %

Vapour Pressure: Negligible at normal ambient temperatures.

Relative Density at 20 °C: 1.04

Vapour Density:No information availableEvaporation Rate:No information availableSolubility in Water:Emulsifies into water.

10 Stability and Reactivity

Possibility of Hazardous Reactions: Hazardous polymerisation will not occur.

Chemical Stability: Stable at ambient temperature and under normal conditions of use.

Conditions to Avoid: Heat, sparks, open flames, hot surfaces and direct sunlight.

Incompatible Materials: Strong oxidising agents.

Hazardous Decomposition Products:

Oxides of carbon, nitrogen, nitrogen oxides, other nitrogen compounds, hydrogen cyanide, hydrogen fluoride, other fluorine compounds, smoke and water.

11 Toxicological Information

Toxicity:

LD50/LC50 Values Relevant for Classification:

CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.

Oral LD50 5,000 mg/kg (rat)
Dermal LD50 2,000 mg/kg (rabbit)

Acute Health Effects

Inhalation: May cause mild irritation.

Skin: May cause skin irritation, itchiness and reddening. **Eye:** May cause eye irritation, stinging and reddening. **Ingestion:** May be fatal if swallowed and enters airways.

Skin Corrosion / Irritation: Based on classification principles, the classification criteria are not met.

Serious Eye Damage / Irritation: Based on classification principles, the classification criteria are not met.

Respiratory or Skin Sensitisation: Based on classification principles, the classification criteria are not met.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: This product does NOT contain any IARC listed chemicals.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

Specific Target Organ Toxicity (STOT) - Single Exposure:

Based on classification principles, the classification criteria are not met.

Specific Target Organ Toxicity (STOT) - Repeated Exposure:

Based on classification principles, the classification criteria are not met.

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Aspiration Hazard: May be fatal if swallowed and enters airways.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for fluazifop-butyl for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.4 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2020).

12 Ecological Information

Ecotoxicity:

Low toxicity to bees. LD50 0.20 mg/bee.

Practically non-toxic to birds:

LD50 >3528 mg/kg (mallard duck)

LC50 /5 day dietary >4321 ppm (mallard duck)

LC50 /5 day dietary >4659 ppm (bobwhite quail)

Aquatic toxicity:

Toxic to aquatic life with long lasting effects.

CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.

EC50/48 h | 12 mg/l (daphnia)

EC50/72 h | 2.5 mg/l (skeletonema costatum)

LC50/96 h 45 mg/l (fathead minnow)

Persistence and Degradability: Low persistence in soils. Half-life in soil is less than 1 week.

Bioaccumulative Potential: No information available

Mobility in Soil: Low mobility in soils.

Other adverse effects: No information available

13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

14 Transport Information

UN Number

ADG Not regulated IMDG, IATA UN 3082

Proper Shipping Name

ADG Not regulated

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (fluazifop-P-butyl (ISO)), MARINE

POLLUTANT

IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (fluazifop-P-butyl (ISO))

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Dangerous Goods Class

ADG Class: Not regulated

IMDG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:

ADG Not regulated

IMDG, IATA III
Marine pollutant: Yes

Symbol (fish and tree)

EMS Number: F-A,S-F

Hazchem Code: •3Z

Special Provisions: 274, 331, 335, 375, AU01

Limited Quantities: 5L

Packagings & IBCs - Packing Instruction: P001, IBC03, LP01

Packagings & IBCs - Special Packing Provisions: PP1
Portable Tanks & Bulk Containers - Instructions: T4

Portable Tanks & Bulk Containers - Special

Provisions: TP1, TP29

15 Regulatory Information

Australian Inventory of Chemical Substances:

CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.

CAS: 79241-46-6 Fluazifop-P-butyl (ISO)

Standard for the Uniform Scheduling of Drugs and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 09.09.2020

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Flammable Liquids 4: Flammable liquids - Category 4

Toxic To Reproduction 2: Reproductive toxicity - Category 2

Aspiration Hazard 1: Aspiration hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment, long-term (Chronic). Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment, long-term (Chronic). Category 2

Data altered compared to the previous version:

Section 9: Flammability. Section 11: Toxicity.

Section 11: Reproductive Toxicity.

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Section 11: Additional Toxicological Information.

Section 12: Aquatic Toxicity. Section 14: Special Provisions.

Section 14: Portable Tans & Bulk Containers - Instructions.

Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - May 2018"

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