according to WHS Regulations

Printing date 28.02.2020 Revision: 28.02.2020

1 Identification

Product Name: GENFARM IOXYNIL 250 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: National Poison Information Centre: 13 11 26

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 subject to the ADG Code when transported in Australia by Road or Rail in packages 500kg(L) or less; or IBCs (refer to SP AU01). However if transported by Air or Sea, this provision does not apply. Then the product is classed as Dangerous (Class 9 Environmentally Hazardous) by IATA and IMDG/IMSBC respectively. See details below and in Section 14 of this SDS.



health hazard

Toxic To Reproduction 2 H361d Suspected of damaging the unborn child.

Aspiration Hazard 1 H304 May be fatal if swallowed and enters airways.



Aquatic Chronic 1 H410 Very toxic to aquatic life with long lasting effects.



Acute Toxicity (Oral) 4 H302 Harmful if swallowed.

Serious Eye Damage/Irritation 2A H319 Causes serious eye irritation.

Skin Sensitisation 1 H317 May cause an allergic skin reaction.

Flammable Liquids 4 H227 Combustible liquid.

Signal Word Danger

Hazard Statements

H227 Combustible liquid. H302 Harmful if swallowed.

H319 Causes serious eye irritation.

H317 May cause an allergic skin reaction.

H361d Suspected of damaging the unborn child.

H304 May be fatal if swallowed and enters airways.

H410 Very toxic to aquatic life with long lasting effects.

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Precautionary Statements		
P201	Obtain special instructions before use	

F201	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.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P272	Contaminated work clothing should not be allowed out of the workplace.
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.
P321	Specific treatment (see on this label).
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P302+P352	IF ON SKIN: Wash with plenty of water.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P362+P364	Take off contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.
P337+P313	If eye irritation persists: Get medical advice/attention.
P370+P378	In case of fire: Use to extinguish: CO2, powder or water spray.
P391	Collect spillage.
P403+P235	Store in a well-ventilated place. Keep cool.
P405	Store locked up.
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.

Γ	Hazardous Components:		
r	CAS: 64742-94-5	Solvent naphtha (petroleum), heavy arom.	64.2%
		♦ Aspiration Hazard 1, H304; Flammable Liquids 4, H227	
ľ	CAS: 3861-47-0	loxynil octanoate (ISO)	25%
		Acute Toxicity (Oral) 3, H301; Toxic To Reproduction 2, H361; Aquatic Chronic 1, H410; Toxic Eye Damage/Irritation 2A, H319; Skin Sensitisation 1, H317	

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. Use polyethylene glycol 400 if available. 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.

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Inaestion:

If swallowed, do not induce vomiting. Immediately rinse mouth with water. Give a glass of water. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration. Seek immediate medical attention.

Symptoms Caused by Exposure:

Inhalation: May cause narcosis and central nervous system (CNS) depression leading to headache,

dizziness, tiredness, nausea and vomiting.

Skin Contact: May cause an allergic skin reaction.

Eye Contact: Causes serious eye irritation.

Ingestion: Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. May be fatal if swallowed and enters airways.

5 Fire Fighting Measures

Suitable Extinguishing Media: Water fog, alcohol-resistant foam, dry chemical or carbon dioxide.

Specific Hazards Arising from the Chemical:

Hazardous combustion products include oxides of carbon and nitrogen and iodine compounds. Combustible liquid.

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.

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. Collect the spilled material and place into a suitable container for disposal. Use only non-sparking tools.

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.

Take precautionary measures against static discharge. 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. Contaminated work clothing must not be allowed out of the workplace. 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 container tightly closed when not in use. Protect from heat, sparks, open flames, hot surfaces and direct sunlight. Keep away from strong oxidising agents, strong reducing agents and bases.

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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 organic 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:

Nitrile 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.

Eve 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.

No information available

9 Physical and Chemical Properties

Appearance:

Form: Liquid

Colour: Yellow to brown

Odour:
Odour Threshold:
PH-Value:
No information available

Flash Point: 66 °C Combustible

Auto-ignition Temperature: No information available Decomposition Temperature: No information available

Explosion Limits:

Organic solvents:

Lower:No information availableUpper:No information availableVapour Pressure:No information available

Density at 20 °C: ~1.07 g/cm³

Vapour Density:No information availableEvaporation Rate:No information availableSolubility in Water:No information available

Partition Coefficient (n-octanol/water): 6.0 log POW (loxynil octanoate)

Viscosity: No information available
Solvent separation test: No information available

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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, strong reducing agents and bases.

Hazardous Decomposition Products: Oxides of carbon and nitrogen and iodine compounds.

11 Toxicological Information

Toxicity:

LD ₅₀ /LC	LD ₅₀ /LC ₅₀ Values Relevant for Classification:	
CAS: 64	CAS: 64742-94-5 Solvent naphtha (petroleum), heavy arom.	
Oral	LD ₅₀	5,000 mg/kg (rat)
Dermal	LD ₅₀	2,000 mg/kg (rabbit)
CAS: 3861-47-0 loxynil octanoate (ISO)		
Oral	LD ₅₀	390 mg/kg (rat)

Acute Health Effects

Inhalation:

May cause narcosis and CNS depression leading to headache, dizziness, tiredness, nausea and vomiting.

Skin: May cause an allergic skin reaction.

Eye: Causes serious eye irritation.

Ingestion:

Harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhoea. 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: Causes serious eye irritation.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

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 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.

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 ioxynil for a human is 0.004 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.04 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).

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12 Ecological Information

Ecotoxicity:

LD50 677 mg/kg (Japanese quail) LD50 1000 mg/kg (Pheasant) LD50 1200 mg/kg (Mallard duck)

Aquatic toxicity:

Very Toxic to aquatic life with long lasting effects.

CAS: 647	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)	
CAS: 3861-47-0 loxynil octanoate (ISO)		
EC₅₀/48 h	0.011 mg/l (daphnia)	
EC₅₀/72 h	0.24 mg/l (diatom)	
LC₅₀/96 h	0.024 mg/l (bluegill)	

Persistence and Degradability: No further relevant information available. Bioaccumulative Potential: Bioaccumulation is not expected to occur.

Mobility in Soil: Moderately mobile in soils.

Other adverse effects: No further relevant 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 subject to the ADG Code when transported in

Australia by Road or Rail in packages 500kg(L) or less;

or IBCs (refer to SP AU01).

IMDG, IATA UN3082

Proper Shipping Name

ADG Not regulated.

IMDG ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (loxynil octanoate (ISO)), MARINE

POLLUTANT

IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (loxynil octanoate (ISO))

Dangerous Goods Class

ADG Class: Not regulated.

IMDG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:

ADG Not regulated.

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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: 3861-47-0 | Ioxynil octanoate (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: 28.02.2020

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

 LD_{50} : 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 Acute Toxicity (Oral) 3: Acute toxicity – Category 3 Acute Toxicity (Oral) 4: Acute toxicity – Category 4

Serious Eye Damage/Irritation 2A: Serious eye damage/eye irritation – Category 2A

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1
Toxic To Reproduction 2: Reproductive toxicity – Category 2
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

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 - February 2016"

The information contained in this safety data sheet is provided in good faith and is believed to be accurate at the date of issuance. Nutrien Ag Solutions Limited makes no representation of the accuracy or comprehensiveness of the information and to the full extent allowed by law excludes all liability for any loss or damage related to the supply or use of the information in this material safety data sheet. MSDS.COM.AU Pty

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Ltd is not in a position to warrant the accuracy of the data herein. The user is cautioned to make their own determinations as to the suitability of the information provided to the particular circumstances in which the product is used.