according to WHS Regulations

Printing date 17.02.2020 Revision: 17.02.2020

1 Identification

Product Name: RELYON GLYPHIX HITECH 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 classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail. (7th edition)



Skin Corrosion/Irritation 1A H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



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



Acute Toxicity (Oral) 4 H302 Harmful if swallowed.

Aquatic Acute 2 H401 Toxic to aquatic life.

Signal Word Danger

Hazard Statements

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage. H411 Toxic to aquatic life with long lasting effects.

Precautionary Statements

P260 Do not breathe dusts or mists.

P264 Wash hands thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.
P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

(Contd. on page 2)

according to WHS Regulations

Printing date 17.02.2020 Revision: 17.02.2020

Product Name: RELYON GLYPHIX HITECH HERBICIDE

(Contd. of page 1)

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER/doctor.
P321 Specific treatment (see on this label).
P363 Wash contaminated clothing before reuse.
P301 Collect prillage.

P391 Collect spillage. 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.

Hazardous Components:		
CAS: 1071-83-6	Glyphosate (ISO)	50%
	Serious Eye Damage/Irritation 1, H318; 🕸 Aquatic Chronic 2, H411	
CAS: 1310-58-3	Potassium hydroxide	<30%
	Skin Corrosion/Irritation 1A, H314; 🗘 Acute Toxicity (Oral) 4, H302	
CAS: 68515-73-1	D-Glucose, decyl octyl ethers, oligomeric	<20%
	Serious Eye Damage/Irritation 1, H318; 🕚 Skin Corrosion/Irritation 2, H315	

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. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

Inaestion:

If swallowed, do not induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention if symptoms occur.

Symptoms Caused by Exposure:

Inhalation: No adverse health effects expected.

Skin Contact: Causes severe skin burns.

Eye Contact: Causes serious eye damage.

Ingestion: Harmful if swallowed.

5 Fire Fighting Measures

Suitable Extinguishing Media:

Water fog, alcohol-resistant foam, dry chemical or carbon dioxide. Do not use full water jet as it may scatter and spread the fire.

(Contd. on page 3)

according to WHS Regulations

Printing date 17.02.2020 Revision: 17.02.2020

Product Name: RELYON GLYPHIXHITECH HERBICIDE

(Contd. of page 2)

Specific Hazards Arising from the Chemical:

Hazardous combustion products include dense black smoke and toxic and irritating vapours. Combustible liquid.

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.

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. Decontaminate the spill area with detergent and water and rinse with the smallest amount of water practicable.

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 container tightly closed when not in use. Do not store for prolonged periods in direct sunlight.

8 Exposure Controls and Personal Protection

Exposure Standards:

CAS: 1310-58-3 Potassium hydroxide

WES Peak limitation: 2 mg/m³

Engineering Controls: Ensure adequate ventilation of the working area.

Respiratory Protection: Respiratory protection is not required under normal use conditions.

Skin Protection:

Elbow-length PVC or nitrile 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.

(Contd. on page 4)

according to WHS Regulations

Printing date 17.02.2020 Revision: 17.02.2020

Product Name: RELYON GLYPHIX HITECH HERBICIDE

(Contd. of page 3)

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: Light brown to dark brown.

Odour: Non-specific

Odour Threshold: No information available

pH-Value: 3 - 7

Melting point/freezing point:No information available **Initial Boiling Point/Boiling Range:**No information available

Flash Point: >110 °C
Flammability: Combustible

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

Explosion Limits:

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

Density: 1.37 g/cm³

Vapour Density:No information availableEvaporation Rate:No information available

Solubility in Water: Soluble in water

Partition Coefficient (n-octanol/water): No information available Viscosity at 40 °C:

63.0 mPa.s (Dynamic)

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: Direct sunlight.

Incompatible Materials: No further relevant information available.

Hazardous Decomposition Products: Dense black smoke and toxic and irritating vapours.

11 Toxicological Information

Toxicity:

LD ₅₀ /LC ₅₀	/LC₅₀ Values Relevant for Classification:		
RELYON (ELYON GLYPHIX HITECH HERBICIDE		
Oral	LD ₅₀	>5000 mg/kg (rat)	
Dermal	LD ₅₀	>5000 mg/kg (rat)	
Inhalation	LC ₅₀ /4 h	>5.08 mg/L (rat)	
CAS: 1310	CAS: 1310-58-3 Potassium hydroxide		
Oral	LD ₅₀	273 mg/kg (rat)	

Acute Health Effects

Inhalation: No adverse health effects expected.

Skin: Causes severe skin burns.

Safety Data Sheet according to WHS Regulations

according to WHS Regulations

Product Name: RELYON GLYPHIX HITECH HERBICIDE

(Contd. of page 4)

Revision: 17.02.2020

Eye: Causes serious eye damage. **Ingestion:** Harmful if swallowed.

Printing date 17.02.2020

Skin Corrosion / Irritation: Causes severe skin burns.

Serious Eye Damage / Irritation: Causes serious eye damage.

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:** Glyphosate is classified by IARC as Group 2A - Probably carcinogenic to humans.

Reproductive Toxicity: Based on classification principles, the classification criteria are not met.

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

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for glyphosate for a human is 0.3 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 30 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:

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Aquatic toxicity	uatic toxicity:		
RELYON GLYP	RELYON GLYPHIX HITECH HERBICIDE		
EC ₅₀ /48 h	8.5 mg/L (daphnia)		
EC ₅₀ /72 h	4.33 mg/L (pseudokirchnerie lla subcapitata)		
LC₅₀/96 h	34 mg/L (rainbow trout)		
CAS: 1310-58-3	CAS: 1310-58-3 Potassium hydroxide		
EC ₅₀ /15 minutes	22 mg/l (bacterial)		
LC₅₀/96 h	45.4 mg/l (rainbow trout)		
LC₅₀/48 h	40 mg/l (daphnia)		

Persistence and Degradability: Glyphosate is persistent in water, but is not persistent in soil.

Bioaccumulative Potential: Bioaccumulation is not expected to occur.

Mobility in Soil: Glyphosate is immobile in soil. **Other adverse effects:** No information available

13 Disposal Considerations

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

(Contd. on page 6)

according to WHS Regulations

Printing date 17.02.2020 Revision: 17.02.2020

Product Name: RELYON GLYPHIX HITECH HERBICIDE

(Contd. of page 5)

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. (Glyphosate (ISO)), MARINE

POLLUTANT

IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE,

LIQUID, N.O.S. (Glyphosate (ISO))

Dangerous Goods Class

ADG Class: Not regulated

IMDG Class: 9 Miscellaneous dangerous substances and articles.

Packing Group:

ADG Not regulated

IMDG, IATA

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: 1071-83-6	Glyphosate (ISO)
	CAS: 1310-58-3	Potassium hydroxide
ľ	CAS: 68515-73-1	D-Glucose, decyl octyl ethers, oligomeric

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

Poisons Schedule: 6

16 Other Information

Date of Preparation or Last Revision: 17.02.2020

according to WHS Regulations

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Product Name: RELYON GLYPHIX HITECH HERBICIDE

(Contd. of page 6)

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)

 LC_{50} : 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)

Acute Toxicity (Oral) 4: Acute toxicity - Category 4

Skin Corrosion/Irritation 1A: Skin corrosion/irritation - Category 1A

Skin Corrosion/Irritation 2: Skin corrosion/irritation - Category 2

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation - Category 1

Aquatic Acute 2: Hazardous to the aquatic environment, short-term (Acute). Category 2

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

Data altered compared to the previous version:

Section 1: Details of Manufacturer or Importer.

Section 4: Symptoms Caused by Exposure.

Section 11: Additional Toxicological Information.

Section 12: Aquatic Toxicity.

Section 14: ADG.

Section 14: Special Provisions.

Section 14: Packagings & IBCs - Packing Instructions.

Section 14: Portable Tanks & Bulk Containers - Instructions.

Section 14: Portable Tanks & Bulk Containers - Special Provisions.

Section 15: Poison Schedule.

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"

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