



SAFETY DATA SHEET

POLARIS 360 HERBICIDE

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND OF THE COMPANY/UNDERTAKING

Product name: POLARIS 360 HERBICIDE
Chemical name of active ingredient(s): Glyphosate, isopropylamine salt
Supplier: Agronica New Zealand Limited
5 Putaitai Street, Stoke, Nelson, New Zealand
P.O.Box 1799, Nelson New Zealand.
Telephone: +64 3 5477266 Fax: +64 3 5477494
Emergency Telephone: 0800 POISON (0800 764 766)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Substance/preparation	Preparation				
<u>Information on hazardous ingredients *</u>	<u>CAS No.</u>	<u>%</u>	<u>EC Number</u>	<u>Symbol</u>	<u>R-Phrases</u>
Common name	CAS No.	%	EC Number	Symbol	R-Phrases
Glyphosate	38641-94-0	36			R36/38

- *Occupational Exposure Limit(s), if available, are listed in section 8*

3. HAZARDS IDENTIFICATION

Hazard Classifications: 6.1D, 6.4A, 9.1B

Most important hazards: May be harmful if swallowed, inhaled or absorbed through the skin. May cause eye irritation, avoid contact with eyes.
Toxic to aquatic organisms with long-lasting effects. Avoid contamination of any water supply with product or empty containers

4. FIRST-AID MEASURES

Effects and symptoms:

First-aid measures:

Inhalation: First aid is not generally required. If in doubt, seek medical advice
Ingestion: First aid is not generally required. If in doubt, seek medical advice
Skin contact: Remove contaminated clothing. Gently wash skin with water and soap for 20 minutes or until chemical is removed.
Eye contact: Wash out with plenty of water with the eyelid held wide open for at least 20 minutes.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable: Not combustible. Use extinguishing media suited to burning materials.
Hazardous thermal: There is no risk of explosion from this product under normal circumstances if it is involved in a fire.

(de)composition products:

Protection of fire-fighters: When fighting fires involving significant quantities of this product, wear a splash suit complete with self contained breathing apparatus.



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6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Wear full protective clothing including face mask, face shield and gauntlets. All skin areas should be covered.
Environmental precautions:	Do not discharge into drains or the environment.
Methods for cleaning up:	Absorb remainder in sand or other inert material. Avoid using sawdust or other combustible materials. Dispose of in an authorized waste collecting point.

7. HANDLING AND STORAGE

Handling:	Keep out of reach of children. Do not smoke, drink or eat while using.
Storage:	Store in original, unopened container in a cool, dry place, out of direct sunlight and away from stock feed or foodstuffs.

Packaging materials
Suitable:

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures:	No special ventilation requirements are normally necessary for this product
Hygiene measures:	When handling do not eat, drink or smoke. Wash hands thoroughly after handling. Wash clothing separately before re-use.

**Occupational Exposure
Limits**
Common name:

Glyphosate

Personal protective equipment:

Respiratory system:	Respirator is recommended.
Skin and body:	Wear suitable protective clothing. Chemical resistant boots.
Hands:	Chemical resistant gloves.
Eyes:	Safety goggles or face shield.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Liquid
Colour:	Clear green
Odour:	Odourless to mild amine odour
Boiling point:	Approximately 100°C at 100kPa
Vapour Density:	No Data
Vapour pressure:	2.37 kPa at 20°C (water vapour pressure)
Solubility in water:	completely soluble in water
Octanol/water partition coefficient	No Data
pH:	4.9-5.3
Flammability:	Not flammable
Explosion properties :	Not Explosive
Oxidation properties:	Not oxidizing

10. STABILITY AND REACTIVITY

Stability:	Not subject to polymerization
Materials to avoid:	Strong oxidizing agents.
Hazardous reactions :	None
Hazardous decomposition products:	Carbon dioxide, Nitrogen and it's compounds and under some circumstances nitrogen oxides.



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11. TOXICOLOGICAL INFORMATION

Preparation

Acute toxicity - Oral: Acid & isopropylamine salt
LD₅₀ (rats) 750 mg/kg
Acute toxicity - Dermal: LD₅₀ (rats) >5000 mg/kg
Acute toxicity – Inhalation: LC₅₀ (rat) 5 to 12 mg/L (4 hours)
Skin irritation: Non irritating (rabbits)
Eye irritation: Slightly irritating (rabbit).
Sensitization : Non sensitizer (guinea-pig)

Common name: **Glyphosate**
Chronic toxicity: No toxic effects observed in rats given 400mg/kg/day
Carcinogenicity: No signs of cancer observed in rats given 400mg/kg/day
Mutagenicity: Not mutagenic
Reproduction toxicity: None
Other information:

12. ECOLOGICAL INFORMATION

Ecotoxicity:

Fish
LC₅₀ (96 hours) bluegill sunfish = 120 mg/L
Harlequin = 168 mg/L
Rainbow trout = 86 mg/L

Daphnia similis
LC₅₀ (48 hours) = 780 mg/L

Birds
LC₅₀ in both mallard and bobwhite quail = >450ppm

Common name: **Glyphosate**
Mobility: Soil - Moderately persistent
Persistence/degradability: The product is moderately persistent. Half-life time (t_{1/2}): 47 days
Breakdown of product is primarily via: microbes

Bioaccumulative potential:

Slightly toxic: wild birds & aquatic invertebrates,
Low Toxic: fish, Non toxic: Honey bees

13. DISPOSAL CONSIDERATIONS

Methods of disposal: Triple rinse empty container and add rinsate to spray tank. Burn in an appropriate incinerator, if circumstances such as wind direction permit. Otherwise crush or puncture and bury in a suitable landfill, or if appropriate, recycle.

14. TRANSPORT INFORMATION

International transport regulations:

UN Number: 3082
Land-Road/Railway
Proper Shipping name: Environmentally hazardous substance, Liquid, N.O.S. (GLYPHOSATE)
ADR/RID Class: 9
Packaging Group: III

Sea

Proper Shipping name: Environmentally hazardous substance, Liquid, N.O.S. (GLYPHOSATE)
ADR/RID Class: 9
Packaging Group: III



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15. REGULATORY INFORMATION

New Zealand Regulatory Information:

NZFSA Approval:

Registered pursuant to the ACVM Act 1997. No P7286.
See www.nzfsa.govt.nz/acvm for registration conditions.

Approved pursuant to the HSNO Act 1996, Approval No. HSR00227
See www.ermanz.govt.nz for approval controls

HSNO Classifications:

6.1D, 6.4A, 9.1B



Classification:

This product is provisionally labelled by the supplier in accordance with the suppliers understanding of the EU regulations.

EU Risk phrases:

R36/38: Irritating to eyes and skin

EU Safety phrases:

S02: Keep out of the reach of children.
S13: Keep away from food, drink and animal feeding stuffs.
S20/21: When using do not eat, drink or smoke.
S24/25: Avoid contact with skin and eyes.
S36/37/: Wear suitable protective clothing and gloves.
S61: Avoid release to the environment. Refer to special instructions/Safety data sheets.

16. OTHER INFORMATION

The information contained in the Safety Data sheet is correct to the best of our knowledge at the date of issue. It is intended as a guide for the safe use, handling, disposal, storage and transportation and is not intended as a warranty or as a specification. The information relates only to the product specified and may not be suitable for combinations with other materials or in processes other than those specifically described herein.

HISTORY

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