



SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product: **Polaris 540**
Chemical Name of Active Ing: Glyphosate
Product Use: Herbicide
Restriction of Use: Refer to Section 15

New Zealand Supplier: ADAMA New Zealand Ltd
Address: Level 1/93 Bolt Road
Tahunanui, Nelson
Telephone: +64 3 543 8275
Email: nzorders@adama.com

**Emergency Telephone: 0800 764 766 (National Poison Centre)
0800 734 607 (24hr Emergency Response)**

Date of SDS Preparation: 27 October 2021

Section 2. Hazards Identification

This substance is hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020

EPA Approval No: HSR100587

Pictograms



Signal Word: **None**

HSNO Classification	Hazard Code	Hazard Statement
Hazardous to the aquatic environment chronic Category 2	H411	Toxic to aquatic life with long lasting effects.

Prevention Code	Prevention Statement
P102	Keep out of the reach of children
P103	Read label carefully and follow all instructions.
P273	Avoid unintended release into the environment.
P281	Use personal protective equipment as required.

Response Code	Response Statement
P391	Collect spillage

Storage Code	Storage Statement
None	None

Disposal Code	Disposal Statement
P501	Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers and add rinsate to spray tank before puncturing and offering for recycling or landfill. Do not allow product to enter waterways. Do not burn product or container.

Section 3. Composition / Information on Ingredients
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Ingredients	Wt %	CAS NUMBER.
Glyphosate acid	40 – 43*	1071-83-6
Other ingredients	balance	Trade secret

* Equivalent to 540 g/L glyphosate

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
If on Skin	Remove contaminated clothing. Gently wash skin with water and soap for 15 minutes or until chemical is removed. If skin irritation occurs: Get medical advice/ attention.
If Swallowed	Wash out mouth with plenty of water. Get medical attention. Never give anything by mouth to an unconscious person.
If Inhaled	Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Apply artificial respiration if not breathing. Get medical advice if breathing becomes difficult.

Most important symptoms and effects, both acute and delayed

Symptoms:

Ingestion:	Not applicable
Inhalation:	Not applicable
Skin:	Not applicable
Eye:	Not applicable
Chronic:	Not applicable

Section 5. Fire Fighting Measures

Hazard Type	Non-Flammable or combustible
Hazards from products	Thermal decomposition may generate: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen chloride, HF
Suitable Extinguishing media	Water spray, water fog, foam.
Precautions for firefighters and special protective clothing	When fighting fires involving significant quantities of this product, wear a splash suit complete with self-contained breathing apparatus. Fight fire from protected area. Dike fire control water for later disposal.
HAZCHEM CODE	3Z

Section 6. Accidental Release Measures

Wear suitable protective clothing, gloves and eye/face protection. Evacuate all unnecessary personnel.

Environmental precautions

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

Methods and material for containment and cleaning up

In the event of a minor spillage: Absorb in sand or other inert material. Use appropriate container to avoid environmental contamination.

In the event of major spillage: Collect and contain as much free liquid as possible. Dike spills using absorbent or impervious materials such as sand or clay for later disposal.

Section 7. Handling and Storage

Precautions for Handling:

- Use only according to label.
- Wear personal protective equipment.
- Avoid unintended release into the environment.

Precautions for Storage:

- Store away from incompatible materials listed in Section 10.
- Keep out of reach of children.
- Store in original, unopened container in cool, dry place, well ventilated place, out of direct sunlight and away from stockfeed or foodstuffs.
- As a substance with Aquatic Ecotoxicity Classifications storage of Polaris 540 must be carried out in such a manner as to prevent contamination of waterways. It is recommended that The New Zealand Standard for the Management of Agrichemicals (NZS8409) is followed.

Section 8 Exposure Controls / Personal Protection

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA		STEL	
	ppm	mg/m ³	ppm	mg/m ³

No ingredients have exposure limits

Workplace Exposure Standard – Time Weighted Average (WES-TWA). The time-weighted average exposure standard designed to protect the worker from the effects of long-term exposure. Workplace Exposure Standard – Short-Term Exposure Limit (WESSTEL). The 15-minute average exposure standard. Applies to any 15- Minute period in the working day and is designed to protect the worker against adverse effects of irritation, chronic or irreversible tissue change, or narcosis that may increase the likelihood of accidents. The WES-STEL is not an alternative to the WES-TWA; both the short-term and time-weighted average exposures apply. Workplace Exposure Standards and Biological Exposure Indices NOV 2017 9TH EDITION.

Engineering Controls

Ventilation required.

Personal Protection Equipment

Eyes	Safety goggles or face shield.
Hands and Skin	Chemical resistant gloves. Wear suitable protective clothing. Chemical resistant boots.
Respiratory	Respiratory protection is not required if good ventilation is maintained.
General	Facilities storing or utilizing this material should be equipped with an eyewash facility and safety shower. Wash hands thoroughly after handling. Wash clothing before re-using.

Section 9 Physical and Chemical Properties

Appearance	Blue liquid
Odour	Odourless
Odour Threshold	Not applicable
pH	6.0 – 9.0
Boiling Point	>100°C
Melting Point	Not available
Flash Point	Non-flammable
Flammability	Non-flammable
Upper and Lower Exposure Limits	Not applicable
Vapour Pressure	Not applicable
Density	c.a. 1.32
Solubilities in water	Soluble in water
Octanol/water partition coefficient	Not available
Auto-ignition Temperature	Not available
Viscosity	Not available
Decomposition point:	Not available

Section 10. Stability and Reactivity

Stability of Substance	This product is stable under normal conditions.
Conditions to Avoid	Keep out of direct sunlight and protect from frost
Incompatible Materials	Avoid contact with strong alkalis and alkaline materials such as lime. Contact with these materials may release Isopropylamine vapour with a strong fishy odour and which is irritating to eyes. Product is corrosive to mild steel, galvanized steel and zinc.
Hazardous polymerization	Hazardous polymerization will not occur.

Section 11 Toxicological Information

Acute Effects:

Swallowed	Not applicable.
Dermal	Not applicable.
Inhalation	Not applicable.
Skin	Not applicable.
Eye	Not applicable.

Chronic Effects:

Carcinogenicity	Not applicable.
Reproductive Toxicity	Not applicable.
Germ Cell Mutagenicity	Not applicable.
Aspiration	Not applicable.
STOT/SE	Not applicable.
STOT/RE	Not applicable.

Toxicity information: Glyphosate (active)
Rat oral: LD50 >5,000 mg/kg
Rabbit dermal: LD50 >5,000 mg/kg
Rat inhalation: LC50 >4.98 mg/L

Section 12. Ecotoxicological Information

HSNO Classification: Hazardous to the aquatic environment chronic Category 2.

Persistence and degradability	Not persistent
Bioaccumulation	Not expected to be bioaccumulative
Mobility in Soil	No data available
Other adverse effects	No data available

Glyphosate (active)
96 H-LC50 Bluegill sunfish 86 mg/L
48 H-LC50 Daphnia magna 780 mg/L
72 H-EbC50 Green Algae 485 mg/L
72 H-EbC50 Marine Algae 1.3 mg/L
7 d EC50 Diatom 42 mg/L

Section 13. Disposal Considerations

Disposal Method: Wherever possible completely use material by using according to label instructions. Dispose of unwanted product and wastes from spillages as hazardous substances in accordance with local and national regulations using a licensed waste disposal company. Triple rinse containers before puncturing and offering for recycling or landfill.



Precautions: Do not allow product to enter waterways.

Disposal methods to avoid: Do not burn product or container.

Section 14 Transport Information

This product is classified as a Dangerous Goods for transport in NZ; NZS 5433



Road and Rail Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S

Air Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S

Marine Transport

UN No: 3082
 Class-primary 9
 Packing Group III
 Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S
 Marine Pollutant No

Section 15	Regulatory Information
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EPA Approval Code: HSR100587

HSNO Classification: Hazardous to the aquatic environment chronic Category 2.

HSW (HS) Regulations 2017 and EPA Notices	Trigger Quantity/Regulation
Certified Handlers	Not required
Location Certificate	Not required
Signage Trigger Quantities	1000L
Emergency Response Plan	1000L
Secondary Containment	1000L
Tracking	Not required
Hazardous Property Controls Notice 2017	
HPC Notice Part 1	Hazardous Property Controls preliminary provisions
HPC Notice Part 3	Hazardous substances in a place other than a workplace
HPC Notice Part 4 Subpart A	Substances that are hazardous to the environment: Site and storage controls
HPC Notice Part 4 Subpart B	Use of substances that are hazardous to the environment
HPC Notice Clause 50(1)	The maximum application rate of this substance shall be 12.3L/ha
HPC Notice Clause 52	This clause does not apply to this substance
HPC Notice Part 4 Subpart C	Qualifications required for application of substances that are hazardous to the environment.
HPC Notice Clauses 62, 63 and 64	Where the substance is applied onto or into water and the water has the potential to leave the place containing the application area, these clauses apply as if the substance has a hazard classification of hazardous to the aquatic environment acute Category 1.
EELs/TELS	
EEL	An EEL _{water} has been set for glyphosate. The EEL value is 0.37 mg/L.
ACVM Act and Regulations	
ACVM Approval No See www.foodsafety.govt.nz for registration controls	P9913

Glossary

ACVM	Agricultural Compounds and Veterinary Medicines Act 1997.
EC50	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority.
HSNO	Hazardous Substances and New Organisms Act 1996.
HSW	Health and Safety at Work Act 2015.
HSW (HS) Regulations 2017.	Health and Safety at Work (Hazardous Substances) Regulations 2017.
LC50	Lethal concentration that will kill 50% of the test organisms
inhaling or ingesting it.	
LD50	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
TEL	Tolerable Exposure Limit.
TLV	Threshold Limit Value-an exposure limit set by responsible
authority.	
UEL	Upper Explosive Level.
WES	Workplace Exposure Limit.

References:

1. EPA Hazardous Substances (Safety Data Sheets) Notice 2017
2. Workplace Exposure Standards and Biological Exposure Indices Nov 2017 edition.
3. Assigning a hazardous substance to a HSNO Approval (Aug 2013).
4. Transport of Dangerous goods on land NZS 5433
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer:

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