


Glyphosate G360

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	Glyphosate G360 7935090 (20 Litres)
Product Code:	7935093 (200 Litres) 7935096 (1000 Litres)
Recommended Use:	Non-selective, non-residual, contact herbicide for the control of grass and broadleaf weeds.
Restrictions of Use:	Refer to Section 15
Company Identification:	Ravensdown Limited
Address:	292 Main South Road, Hornby, Christchurch, 8042 PO Box 1049, Christchurch 8011
Customer Centre:	0800 100 123
National Poisons Information Centre:	0800 POISON (0800 764 766)
Emergency Phone Number:	0800 CHEMCALL (0800 243 622) (24hr) (Emergencies Only)
Transport Emergency Phone Number:	111 - tell operator what service is needed: Fire, Ambulance or Police
Date of SDS Preparation	12 October 2020

Section 2: HAZARD IDENTIFICATION

This substance is hazardous according to the EPA Hazardous Substances (Classification) Notice 2017

EPA Approval No:	HSR000767
Pictograms:	
Signal Word:	Warning

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
9.1B	H411	Toxic to aquatic life.	Aquatic Chronic 2

Prevention Code	Prevention Statement
P103	Read label before use.
P273	Avoid release to the environment.

Response Code	Response Statement
P391	Collect spillage.

Storage Code	Storage Statement
None allocated	

Disposal Code	Disposal Statement
P501	Dispose of according to Local Regulations or Authorities

Section 3: COMPOSITION INFORMATION

INGREDIENT	CAS No.	CONTENT
Glyphosate as the IPA salt	1071-83-6	36%
Other ingredients, filler etc.	Proprietary	To bal

Section 4: FIRST AID MEASURES

Routes of Exposure:	
If in eyes:	Rinse cautiously with water for several minutes. If eye irritation persists: Get medical advice/attention.
If on skin:	Remove contaminated clothing and wash affected area thoroughly with soap and water. If a large area is affected occurs seek medical assistance.

If ingested:	Never give anything by mouth to an unconscious person. If swallowed DO NOT induce vomiting. For advice, contact the National Poisons Centre on 0800 POISON (0800 764 766). Seek medical assistance immediately.
If inhaled:	Remove patient to fresh air. Lay down and keep warm and rested. If breathing is shallow or has stopped ensure airway is clear and apply resuscitation. Seek medical assistance immediately.
Most important symptoms and effects, both acute and delayed	
Symptoms:	
Eyes:	Not applicable.
Skin:	Not applicable.
Ingested:	Not applicable.
Inhaled:	Not applicable.
Chronic:	Not applicable.
Notes to Doctor:	Treat symptomatically.

Section 5: FIRE FIGHTING MEASURES

Hazard Type	Non Flammable
Hazards from combustion products	This product or solutions of this product react with galvanised steel or unlined steel containers and tanks, to produce hydrogen gas which may form a highly flammable or explosive gas mixture.
Suitable Extinguishing media	Water fog, foam, carbon dioxide or dry chemical
Precautions for firefighters and special protective clothing	Full protective clothing and self-contained breathing apparatus.
HAZCHEM CODE	3Z

Section 6: ACCIDENTIAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
Wear appropriate protective clothing as detailed in Section 8. Exclude non-essential people from the area.
Environmental precautions:
Prevent from entering drains, waterways or sewers. If spill does enter waterways contact local authority.
Methods and material for containment and cleaning up:
Contain spill and absorb with inert material such as soil, sand or absorbent granules and place in a sealable waste container. Dispose of according to Section 13.

Section 7: HANDLING AND STORAGE

Handling:	Read label before use. Avoid release to the environment. Wear protective clothing as detailed in Section 8.
Storage:	Store away from incompatible materials listed in Section 10. Store in original container tightly closed, well ventilated and in a locked, dry, cool area away from foodstuffs, fertiliser and seed. Do not mix, use or store in galvanized or unlined steel containers. Store in accordance with NZS 8409 Management of Agrichemicals This product is subject to signage and secondary containment when stored in quantities of 1000L or more, either alone or in aggregate with substances of the same hazard classification. More than 1000L require emergency response plans. For full details refer to NZS 8409 Management of Agrichemicals and HSNO Regulations (Emergency Management and Identification Regulations).

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

Substance	TWA ppm mg/m ³	STEL ppm mg/m ³
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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 2019 11TH EDITION.

Engineering Controls:	Handle in well-ventilated area. Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below exposure limits. Avoid inhalation of spray mist.
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Personal Protection Equipment:



Eyes:	When opening the container, preparing spray and when contact with concentrate or solution is likely, wear safety goggles.
Skin/Hands:	When opening the container, preparing spray and when contact with concentrate or solution is likely, wear waterproof gloves, cotton overalls buttoned to the neck and wrist, and boots.
Respiratory:	Handle in well ventilated area.
General:	Do not eat, drink or smoke while using this product. Remove protective clothing and wash hands and face before meals and after work. Wash protective clothing daily after work.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid
Colour	Clear brown
Odour	Faint sweet odour
Odour Threshold	Not available
pH	4.0 – 6.0
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Non Flammable
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Vapour Density	Not available
Specific Gravity	1.16 – 2.22
Water Solubility	Soluble in water
Partition Coefficient:	Not available
Auto-ignition Temperature	Not available
Decomposition Temperature	Not available
Kinematic Viscosity	Not available
Particle Characteristics	Not available
Other information	(SL) Soluble Concentrate

Section 10: STABILITY AND REACTIVITY

Stability of Substance	When stored appropriately this product should show no significant degradation for 2 years from the date of manufacture.
Possibility of hazardous reactions	Not available
Conditions to Avoid	Do not mix, store or apply the product or spray solutions in galvanized or unlined steel containers or spray tanks.
Incompatible Materials	Corrosive to mild steel, galvanized steel and zinc. Non-corrosive to stainless steel, polyethylene and plastics. Avoid contact with strong acids, alkalis and oxidizing agents.
Hazardous Decomposition Products	None known. Refer to Section 5.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	Not applicable. LD ₅₀ (rat) 4050mg/kg for glyphosate (IP salt) Amounts swallowed incidental to normal handling are unlikely to cause injury. Large amounts swallowed may cause injury. Symptoms include nausea, vomiting, gastrointestinal discomfort, diarrhoea, hypotension and pulmonary oedema.
Dermal	Not applicable. LD ₅₀ (rabbit) >5000mg/kg for glyphosate (IPA salt).
Inhalation	Not applicable. LC ₅₀ (rat) (4hr) >1.3mg/l for glyphosate (IPA salt) No adverse effects are to be expected. When applying this product avoid inhalation of spray mist. Some temporary irritation may be experienced.
Eye	The concentrate may cause eye irritation but permanent damage is not anticipated. Prolonged contact may cause damage.
Skin	Causes skin irritation.

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.

Section 12: ECOLOGICAL INFORMATION

HSNO Classes: 9.1B = Toxic to aquatic life.

Product:	
Persistence and degradability/Mobility	Low mobility in soil. Glyphosate is strongly adsorbed by the soil. Microbial degradation is the major cause of loss from the soil. Half life average 41 days (16-77 days)
Bioaccumulation	Glyphosate does not bioaccumulate.
Other adverse effects	Avoid unintended release into streams and waterways.

Ecotoxicity:

Acute Toxicity (fish) (glyphosate as IPA salt)
 LC₅₀ (rainbow trout) (96hr) 8.2-26mg/l
 LC₅₀ (bluegill sunfish) (96hr) 5.8-14mg/l (MCPB)
 LC₅₀ (carp) (96hr) 19.7mg/l
Acute Toxicity (daphnia) (glyphosate as IPA salt)
 LC₅₀ (48hr) 480mg/l

Toxic to fish and other aquatic organisms

Acute toxicity to birds (glyphosate)
 LD₅₀ (bobtail quail) 3850mg/kg

not toxic to birds

Acute toxicity (bees) (glyphosate)
 LD₅₀ 100µg/bee

not toxic to bees

Section 13: DISPOSAL INFORMATION

Disposal Method:	Triple rinse container and add rinsate to spray tank.
Container Disposal:	Triple rinse container and add rinsate to spray tank. Triple rinsed containers containing the Agrecovery logo on the label and that are free of all residues and have an intact legible label may be taken to an Agrecovery collection site for disposal. Otherwise crush and bury in an approved landfill. Do not burn. Do not use container for any other purpose
Precautions or methods to avoid:	Do not allow to enter waterways.

Section 14: TRANSPORT INFORMATION

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012

**Road, Rail, Sea and Air Transport**

UN No	3082
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (glyphosate 36%)
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 5L, it can be transported as a non-DG as long as the product packaging is still labelled as per DG requirements and the driver is given safety information in accordance with Chapter 3.4 of the UNRTDG.

Section 15: REGULATORY INFORMATION

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017	
EPA Approval Code:	HSR000767
HSNO Classification:	9.1B
HSW (HS) Regulations 2017	Trigger Quantity
Signage Trigger Quantities (Schedule 3)	1000L(9.1B)
Emergency Response Plan (Schedule 5)	1000L(9.1B)
Secondary Containment (Schedule 5)	1000L(9.1B)
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
HSNO Additional Controls (Restrictions of use)	
77A - A use restriction is applied to this substance.	Do not apply into or onto water.
Hazardous Property Controls Notice 2017	
HPC Notice Part 4 Clause 47	Equipment for class 9 substances must be appropriate
HPC Notice Part 4 Clause 48	Records of application of class 9 pesticides and plant growth regulators
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 3	Hazardous substances in a place other than a workplace.
ACVM Act and Regulations	
See www.foodsafety.govt.nz for registration conditions	P8531

Section 16: OTHER INFORMATION

Glossary

EC ₅₀	Median effective concentration.
EEL	Environmental Exposure Limit.
EPA	Environmental Protection Authority
HSNO	Hazardous Substances and New Organisms.
HSW	Health and Safety at Work.
LC ₅₀	Lethal concentration that will kill 50% of the test organisms inhaling or ingesting it.
LD ₅₀	Lethal dose to kill 50% of test animals/organisms.
LEL	Lower explosive level.
OSHA	American Occupational Safety and Health Administration.
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 5433:2012
5. HSW (Hazardous Substances) Regulations 2017

Disclaimer

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Please contact Ravensdown, if further information is required.

Issue Date: 12 October 2020

Review Date: 12 October 2025