Safety Data Sheet

ravensdown

Basis

Section 1: SUBSTANCE IDENTIFICATION AND SUPPLIER

Product Name:	**BASIS**
Product Code:	7930001 (1kg)
Recommended Use:	Selective herbicide for the control of broadleaf weeds in cereals
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	26 May 2022

Section 2: HAZARD IDENTIFICATION

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

EPA Approval No:	HSR000231
Pictograms:	
Signal Word:	**Warning**

HSNO Classification	Hazard Code	Hazard Statement	GHS Category
6.3B	H316	Causes mild skin irritation.	Skin Irrit. 3
9.1A	H400	Very toxic to aquatic life.	Aquatic Acute 1
9.2A	H421	Very toxic to the soil environment.	-

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

Response Code	Response Statement
P391	Collect spillage.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.

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
Chlorsulfuron	64902-72-3	75%
Non-hazardous ingredients	Proprietary	25%

Section 4: FIRST AID MEASURES

Routes of Exposure:	
If in eyes:	Flush with plenty of water for 15 minutes holding eyelids open if necessary. Seek medical assistance if necessary.
If on skin:	Remove contaminated clothing and wash affected area thoroughly with soap and water. If a large area is affected : Get medical advice/attention.
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:	Causes mild skin irritation.
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	If involved in a fire may evolve oxides of carbon, nitrogen and sulphur
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	**2Z**

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:
Sweep up solids without generating dust. Contain liquid spill and absorb with inert material such as soil, sand or absorbent granules and place in a sealable waste container. Dispose of waste safely in an approved landfill and of according to Section 13.

Section 7: HANDLING AND STORAGE

Handling:	Read label before use. Avoid contact with skin, eyes and inhalation of spray mist. Avoid release to the environment. Record Keeping: Records of use as described in NZS 8409 Management of Agrichemicals must be kept.
Storage:	Keep out of reach of children. Store away from incompatible materials listed in Section 10. Store in original container tightly closed and in a locked, dry, cool area away from foodstuffs, fertiliser and seed. Store in accordance with NZS 8409 Management of Agrichemicals. Do not store with classes 1 or 5 substances. This product is subject to signage when stored in quantities of 100kg or more, either alone or in aggregate with substances of the same hazard classification. More than 100kg requires emergency response plans. For full details refer to NZS 8409 Management of Agrichemicals and HSWA Regulations.

Section 8: EXPOSURE CONTROL/PERSONAL PROTECTION

WORKPLACE EXPOSURE STANDARDS (provided for guidance only)

	TWA		STEL	
Substance	**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 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.

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:	Not required.
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	Granule
Colour	Off White
Odour	Odourless
Odour Threshold	Not available
pH	Not available
Boiling Point	Not available
Melting Point	Not available
Freezing Point	Not available
Flash Point	Not available
Flammability	Not available
Upper and Lower Explosive Limits	Not available
Vapour Pressure	Not available
Density	Not available
Specific Gravity	Not available
Bulk Density	Not available
Water Solubility	Disperses 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	(WDG) Water Dispersible Granule

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	None known.
Incompatible Materials	Avoid contact with strong oxidising agents.
Hazardous Decomposition Products	None known. Refer to Section 5.

Section 11: TOXICOLOGICAL INFORMATION

Acute Effects:

Swallowed	Not applicable. LD_{50} (rat) >5000mg/kg for chlorsulfuron
Dermal	Not applicable. LD_{50} (rabbit) >2000mg/kg for chlorsulfuron
Inhalation	Not triggered however when applying this product avoid inhalation of spray mist.
Eye	Not applicable.
Skin	May cause mild skin irritation. May cause milk skin irritation on prolonged contact

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: 9.1A = Very toxic to aquatic life.
9.2A = Very toxic to the soil environment.

Product:

Persistence and degradability/Mobility	Low mobility. Microbial degradation and hydrolysis is the major cause of loss from the soil. Average half-life in soil is typically 28-42days.
Bioaccumulation	No data available.
Other adverse effects	Avoid unintended release into streams and waterways.

Ecotoxicity:

Acute Toxicity (fish) (chlorsulfuron)
LC_{50} (minnow) (96hr) >980mg/l
LC_{50} (rainbow trout) (96hr) >122mg/l
Very toxic to aquatic organisms

Acute Toxicity (birds)
LD_{50} (mallard duck) >5000mg/kg
LD_{50} (Bobwhite quail) >5500mg/kg
Nontoxic to birds

Acute Toxicity (bees)
LD_{50} >25ug/bee
Non-toxic to bees

Very toxic to some plant species (selective herbicide)

Section 13: DISPOSAL INFORMATION

Disposal Method:	Triple rinse container and add rinsate to the spray tank. Dispose of product only by using in accordance with label directions, or through Agrecovery Chemical Recovery Service or alternative approved programs.
Container Disposal:	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 free recycling. 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 product or empty container to contaminate any waterway.

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	3077
Class - Primary	9
Packing Group	III
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Chlorsulfuron 75%)
Marine Pollutant	Yes
Special Provisions	If the product's individual container is below 5kg, 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. Additional Information: Do not carry more than 10kg of BASIS on a passenger service vehicle

Section 15: REGULATORY INFORMATION

This substance is classified hazardous according to the EPA Hazardous Substances (Classification) Notice 2017	
EPA Approval Code:	HSR000231
HSNO Classification:	6.3B, 9.1A, 9.2A

HSW (HS) Regulations 2017	**Trigger Quantity**
Signage Trigger Quantities (Schedule 3)	100L (9.1A)
Emergency Response Plan (Schedule 5)	100L (9.1A)
Secondary Containment (Schedule 5)	100L (9.1A)
Tracking (Schedule 26)	Not required
Certified Handlers	Not required
HSNO Additional Controls (Restrictions of use)	
77A -	The substance must not be applied onto or into 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 3	Hazardous substances in a place other than a workplace.
HPC Notice Part 4 Subpart A	Site and storage controls for class 9 substances
HPC Notice Part 4 Subpart C	Qualifications required for application of class 9 pesticides.
ACVM Act and Regulations	
See www.foodsafety.govt.nz for registration conditions	**P8022**

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: 26 May 2022 Review Date: 14 September 2025