

1. PRODUCT & COMPANY IDENTIFICATION

Product Identification/Name:	SuperWetter
Alternative Name:	Greater than 90% organomodified polydimethylsiloxane
Product Use:	Agricultural spray wetter/penetrant
Company Identification:	Rainbow & Brown Limited 68A Tallyho Street, Rotorua, New Zealand PO Box 10049, Mail Centre, Rotorua, 3046
Telephone:	+64 7 350 2009
Fax:	+64 7 350 2008
Toll-Free Phone:	0508 299 299
After Hours Emergency	+64 27 498 2574
National Poisons Centre	0800 764 766
CHEMCALL Emergency Response	0800 CHEMCALL 24/7, 365 days a year
Website:	www.rainbowbrown.co.nz
Date of Issue:	26 November 2018– Version 1.0
Latest Revision Date:	17 September 2024 – Version 2.1

2. HAZARDS IDENTIFICATION

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

EPA Approval No:	HSR002503
Pictograms:	
Signal Word:	WARNING

GHS Classification & Category	HSNO Classification	Hazard Code	Hazard Statement
Acute Inhalation Toxicity, Category 4	6.1D	H332	Harmful if inhaled
Eye Irritation, Category 2	6.4A	H319	Causes serious eye irritation
Hazardous to the aquatic environment, chronic, Category 2	9.1B	H411	Toxic to aquatic life with long-lasting effects

Prevention Code	Prevention Statement
P102	Keep out of reach of children
P103	Read label before use
P261	Avoid breathing mist/spray
P264	Wash hands thoroughly after handling
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment
P280	Wear eye/face protection

Response Code	Response Statement
P101	If medical advice is needed, have the product container or label at hand
P304 + P340	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P312	Call a POISON CENTRE or doctor/physician if you feel unwell.
P305 + P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do and continue rinsing
P337 + P313	If eye irritation persists: Get medical advice/attention.
P391	Collect spillage.

Storage Code	Storage Statement
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Disposal Code	Disposal Statement
P501	In accordance with the EPA Hazardous Substances (Disposal) Notice 2017. Refer to Section 13 of this SDS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS Number	Concentration (%w/w)
Polyalkyleneoxide modified-heptamethyltrisiloxane	67674-67-3	97%
Polyalkylene oxide	27274-31-3	3%

4. FIRST-AID MEASURES

Eye Contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do and continue rinsing. If eye irritation persists, get medical advice/attention.
Skin:	Remove contaminated clothing. Wash gently and thoroughly with plenty of water (use non-abrasive soap if necessary). Get medical advice/attention if irritation occurs.
Ingestion:	If swallowed, do NOT induce vomiting. Rinse mouth with water. Contact a Poisons Information Centre or call a doctor.
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical advice if a person feels unwell or has respiratory distress.
General:	Call the National Poisons Centre (0800 POISON, 0800 764 766) for advice if you feel unwell or have been exposed and are concerned. Have product label or SDS at hand.

5. FIRE-FIGHTING MEASURES

Flash Point:	Non-flammable.
Flammable Limits:	Does not burn. Lower flammability limit: No data available. Upper flammability limit: No data available.
Extinguishing Media:	Fine water spray, foam, CO2. Do not use strong water jets. Use extinguishing media suited to surrounding materials.
Fire & Explosion Hazards:	Heating may cause expansion/decomposition leading to the rupture of containers. If safe to do so, remove containers from the path of fire. Cool heated containers with water spray.
Fire Fighting Equipment:	Wear personal protection equipment including SCBA.
Fire Fighting Instructions:	Do not allow runoff into drains. Water may cause excessive foaming.
Hazchem Code:	3Z

6. ACCIDENTAL RELEASE MEASURES

Personal precautions:	Clear area of all unprotected personnel. Keep people upwind of release. Use appropriate protective clothing and equipment.
Spills:	In the event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including eye/face protection. All skin areas should be covered. Refer to Section 8 for personal protective equipment. If vapours or mists are likely to build up in the clean-up area, we recommend using a respirator. Usually, no respirator is necessary when using this product.

	Stop the leak if safe to do so and contain the spill. Collect liquid spills. Absorb small spills and residues with sand, vermiculite, or other suitable absorbent material. If the spill is too large or if absorbent material is not available, try to create a dike to stop material from spreading or going into drains or waterways. Sweep up and shovel or collect contaminated solids into labelled containers for recycling or salvage and dispose of them promptly. After spills, wash the area preventing runoff from entering drains. If a significant quantity of material enters drains, advise emergency services.
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7. HANDLING AND STORAGE

Label:	Read the label before use.
Handling:	Refer to Section 8 of this SDS for details of personal protective measures, and make sure that those measures are followed. The measures detailed below under "Storage" should be followed during handling to minimise risks to persons using the product in the workplace. Thoroughly launder protective clothing before storage or re-use.
Storage:	Keep out of reach of children. Store in the original closed container in a cool well-ventilated place away from food and feedstuffs. Store in accordance with the current version of NZS8409 Management of Agrichemicals. Storage of 1000 L or more requires signage, secondary containment and an emergency response plan.

8. EXPOSURE CONTROLS & PERSONAL PROTECTION

Exposure Guidelines:	Ingredient	CAS Number	TWA (mg/m³)	STEL (mg/m³)
	Polyalkyleneoxide modified-heptamethyltrisiloxane	67674-67-3	Not set	Not set
	Polyalkylene oxide	27274-31-3	Not set	Not set
	WorkSafe's 13th edition of WES and BEI values, published April 2022. The WES TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8-hour working day for a 5-day working week. The STEL (Short-Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak" is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.			
Engineering Controls:	No special engineering controls or ventilation requirements are normally necessary for this product. However, make sure that the work environment remains clean, and that vapours and spray mists are minimised.			

Personal Protection:	   
Respiratory Protection:	Usually, no respirator is necessary when using this product outdoors or in well-ventilated areas. However, if you have any doubts refer to standard AS/NZ 1715 for appropriate equipment.
Skin Protection:	Wear protective clothing such as impervious gloves and overalls when using. See below for suitable material types. Protective clothing should be made from the following materials: rubber, PVC. Refer to Standard AS 2161, AS2919 and AS.NZ2210.
Eye Protection:	Protective glasses or goggles should be worn when this product is being used. Emergency eye wash facilities are also recommended in an area close to where this product is being used. Refer to standard AS.NZ1337.
Dust:	N/A
General advice:	Eyebaths or eyewash stations and safety deluge showers should be provided near where this product is being used. Do not eat, drink, or smoke while using. Wash hands and exposed skin thoroughly with soap and water before meals and after work. Wash protective clothing daily after work. Launder contaminated clothing separately from household laundry.

9. PHYSICAL & CHEMICAL PROPERTIES

Appearance:	Clear colourless to light yellow/amber liquid
Odour:	Polyether characteristic odour
Odour Threshold:	No data
pH:	6.0 - 8.0 (1% aqueous)
Boiling Point:	> 150°C (copolymer)
Melting point:	No specific data; Liquid at normal temperatures
Freezing point:	-50°C (pourpoint)
Flash Point:	Non-flammable (FP 118 °C)
Flammability (solid, gas):	Not applicable
Flammability LEL/UEL:	Not applicable
Vapour Pressure:	<1 mm Hg at 20°C
Vapour Density:	>1 (Air = 1)
Relative density:	1.015 g/cm ³
Solubility:	Dispersible in water (12.1 g/L)
Partition coefficient: n-octanol/water:	No data

Autoignition Temperature:	Not available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Particle characteristics:	Not applicable
Volatility:	No data
Volatiles:	No data
Evaporation rate:	No data

10. STABILITY & REACTIVITY

Stability:	Stable under normal conditions.
Reactivity:	This product is unlikely to react or decompose under normal storage conditions. However, if you have any doubts, contact the supplier for advice on shelf-life.
Conditions to Avoid:	Exposure to heat, direct sunlight.
Incompatibility:	Strong oxidising agents.
Hazardous Decomposition Products:	Oxides of carbon, formaldehyde, silicon.
Hazardous Polymerisation:	This product will not undergo polymerisation reactions.

11. TOXOLOGICAL INFORMATION

Acute toxicity	Harmful if inhaled. Not classified as being acutely toxic by oral or dermal exposure.
Skin corrosion/irritation:	Product is not classified as a skin irritant.
Eye damage/irritation:	Product is classified as a serious eye irritant. Strongly irritating in rabbit studies (OECD Test Guideline 405).
Respiratory/skin sensitisation:	Product is not classified as a sensitiser. Contact sensitisation study on guinea pig (OECD Test Guideline 406).
Mutagenicity:	Product is not classified for mutagenicity. Negative Ames-test.
Carcinogenicity:	No data available.
Reproductive Toxicity:	No irreversible effects on male or female reproductive systems.
Specific Target Organ Toxicity:	No data available to indicate classification.
Aspiration hazard:	No aspiration hazard identified.
Toxicological data:	Acute toxicity Mouse, Oral LD50 >5000 mg/kg (OECD Test Guideline 401) Rat, Dermal LD50 >4000 mg/kg (OECD Test Guideline 402)

	Rat, Inhalation LC50 (4 h) 2 mg/L (aerosol) ; similar material Rat, Inhalation LC50 (4 h) >11.78 mg/L (aerosol, 5% dilution); similar material Repeated Dose Toxicity Rat (28 d; NOAEL 1000 mg/kg
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12. ECOLOGICAL INFORMATION

Aquatic environment:	Product is toxic in the aquatic environment with long-lasting effects.
Soil environment:	No data available.
Terrestrial vertebrates:	No data available.
Terrestrial invertebrates:	No data available.
Persistence and biodegradability:	Aqueous abiotic hydrolysis is expected to contribute to degradation. No data available on bioaccumulative potential.
Mobility in soil:	No data available.
Other adverse effects:	No data available.
Ecotoxicological data:	Fish: Rainbow trout LC50 (96 h) 4.5 mg/L (OECD Test Guideline 203) NOEC 3.2 mg/L (OECD Test Guideline 203) Aquatic invertebrate: <i>Daphnia magna</i> EC50 (48 h) 24 mg/L (OECD Test Guideline 202) OEC 5.6 mg/L (OECD Test Guideline 202)

13. DISPOSAL CONSIDERATIONS

Disposal Method:	Product Disposal: Dispose of this product only by using it according to the label or at an approved landfill. Avoid contamination of any water supply with the product or empty container. Do not dispose of this product down drains or sewers. Ensure the legality of disposal by consulting regulations prior to disposal.
Container Disposal:	Ensure the container is empty. Triple rinse empty container and add residue to spray tank. Do not burn containers. Crush or puncture and bury in a suitably approved landfill or through Agrecovery recycling service. 

14. TRANSPORT INFORMATION

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

Dangerous Goods	3082
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Classification:	
Shipping Name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (SILICONE SURFACTANT)
Class:	9
UN Number:	3082
Packaging group:	III
Hazchem Code	3Z
Marine Pollutant:	Yes
IER Guide	No. 47
IMDG EMS	F-A-S-F

15. REGULATORY INFORMATION

All of the significant ingredients in this formulation are compliant with NICNAS regulations.

ACVM Act 1997 Registration No:	Exempt
HSNO Act 1996, Approval No:	HSR002503
Substance description:	ADDITIVES, PROCESS CHEMICALS AND RAW MATERIALS (SUBSIDIARY HAZARD) GROUP STANDARD 2020
Certified Handler:	Not required
Qualified Handler:	Not required
Tracking:	Not required
Compliance Certificate:	Not required
Quantity that must be secured:	Not required
Location Certificate	Not required
Emergency Response Plan:	1000 L
Secondary Containment:	1000 L
Signage:	1000 L
Fire Extinguishers:	No fire extinguisher requirement specified.
Record-keeping :	No

16. OTHER INFORMATION

Glossary

AEL	Acceptable Exposure Limit
DT₅₀	Time (days) for 50% loss
EC₅₀	Median effective concentration
EEL	Environmental Exposure Limit
EPA	Environment Protection Authority
GHS	Globally Harmonised System
HSNO	Hazardous Substances & New Organisms Act
Koc	Organic carbon partition coefficient
LFL	Lower Flammability Limit
LC₅₀	Lethal Concentration in air or water for 50% of test organisms
LD₅₀	Lethal Dose for 50% of test organisms
NOEL	No Observable Effect Level
OSHA	Occupational Safety & Health Administration (USA)
OSH or WorkSafe	WorkSafe New Zealand
PEL	Permissible Exposure Level
Pow	Octanol water partition coefficient (ratio of the concentration of a chemical in octanol and water at equilibrium and at a specified temp.)
pH	Measure of acidity/alkalinity of a substance on a 1-14 scale (1=strong acid, 14 = strongly alkali)
STEL	Short-Term Exposure Limit
TEL	Tolerable Exposure Limit
TLV	Threshold Limit Value – an exposure limit set by a competent authority
TWA	Time Weighted Average – the average concentration of a chemical in the air over a total exposure time (usually 8 hours)
UFL	Upper Flammability Limit
WES	Workplace Exposure Standard – set by WorkSafe NZ

The data in this Safety Data Sheet relates only to this product alone, and not to its use in combination with other substances or products. In such circumstances, assuming the combination is permitted (refer to product labels, and contact manufacturer if in doubt), be guided by the most hazardous of the substances involved and observe the more stringent of all hazard controls applicable to the products used.

Date of Safety Data Sheet: 17 September 2024

Reason for Revision: Review and update to new legislative requirements.

Revision 1.1 – 13 May 2022 – Updated layout and format of the document.

Revision 2.0 - 26 June 2023 – Full review and update to meet new regulations.

Revision 2.1 – 17 September 2024 – Updating Section 2 to updated layout.

Further Information: Rainbow & Brown Limited
Toll-Free Phone (0508) 299 299
