

Section 1: Identification			
Product name:	Reaper 688SG		
Other names:	Glyphosate 688		
Recommended use:	A concentrated granular herbicide for the control of a wide range of broadleaf weeds and grasses in agriculture, horticulture, forestry and non-cropland areas.		
Manufacturer/Importer details:	Agritrade 1 Robin Mann Place Christchurch Airport PO Box 292, Christchurch 8140 Phone: 03 372 0890		
24 hour emergency contact:	0800 CHEMCALL (0800 243622)		
National Poisons Centre:	0800 POISON (0800 764766)		
Section 2: Hazard identificatio	on		
	Product is classified as hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996.		
HSNO Approval:	HSR100959		
Hazardous classification:	Skin irritant Category 2, Eye damage Category 1, Hazardous to the aquatic environment chronic Category 2.		
Pictograms:	上京 生		
Signal word:	DANGER		
Hazard statements:	H315 Causes skin irritation. H318 Causes serious eye damage. H411 Toxic to aquatic life with long lasting effects.		
Prevention statements:	<ul> <li>P102 Keep out of reach or children.</li> <li>P103 Read label before use.</li> <li>P264 Wash hands, arms and face thoroughly after handling.</li> <li>P273 Avoid release to the environment.</li> <li>P280 Wear protective gloves, protective clothing, eye and face protection.</li> </ul>		
Response statements:	<ul> <li>P101 If medical advice is needed, have product container or label at hand.</li> <li>P302 + P352 IF ON SKIN: Wash with plenty of soap and water.</li> <li>P332 + P313 If skin irritation: Get medical advice/attention.</li> <li>P362 Take off contaminated clothing and wash before reuse.</li> </ul>		

#### SAFETY DATA SHEET Last revised: May-2024



	P305 + P351 + P338 IF IN several minutes. I easy to do. Contir P310 Immediately call a I	Remove contac nue rinsing.	t lenses, if present an	
Storage statements:	-			
Disposal statement:	P501 Dispose of product Regulations. See			cal
Additional Label Requirements:	Do not apply into or onto v Take all reasonable steps cause any significant advo the application area.	to ensure that		
Section 3: Composition/info	ormation on ingredients			
Chemical identity of	Ingredient	CAS No.	Proportion %w/w	1
ingredients with health or environmental hazards:	Glyphosate (present as ammonium salt*)	40465-66-5	75.7	
	Ethoxylated tallow amine	61791-26-2	5-15	
	Other ingredients * Equivalent to 68.8% Gly	Proprietary	To 100	
Section 4: First-aid measure First aid measures:	If medical advice is neede hand. For advice contact [0800 764 766] or a docto	National Poison		
Ingestion:	Do NOT induce vomiting. or doctor for advice.	Rinse mouth. C	all a POISON CENTF	₹E
Inhalation:	Remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTRE or doctor if person feels unwell. If person is not breathing dial 111 for an ambulance, then give artificial respiration, preferably mouth-to-mouth if possible.			
Skin contact:	Wash with plenty of soap and water. Wash contaminated clothing before reuse. If skin irritation occurs get medical attention.			
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice.			
First aid facilities:				
Advice to doctor:	Provide eye baths and sa product contact or splashi		ose to areas where	



	Treat symptomatically.	
Section 5: Fire-fighting measures		
Flammability:	Non-flammable. However, avoid generation of dust. Fine dust dispersed in air in sufficient concentrations and in the presence of an ignition source is a potential dust explosion hazard.	
Appropriate extinguishing media:	Water spray, foam, dry powder, carbon dioxide. Do NOT use high pressure water stream.	
Hazardous decomposition products:	In a fire, may release oxides of carbon and nitrogen.	
Special protective equipment and precautions for fire- fighters:	In the event of fire, wear self-contained breathing apparatus. Remove product from areas of fire, or otherwise cool containers with water in order to avoid pressure being built up due to heat. Prevent run-off from contaminating drains, sewers or waterways. Inform appropriate authorities immediately if product or run-off enters waterways.	
HAZCHEM code:	2Z	
Section 6: Accidental release	emeasures	
Personal precautions:	Wear protective clothing (overalls buttoned at wrist and neck), chemical resistant gloves and boots and chemical goggles or face shield.	
Environmental precautions:	Contain spillage. Prevent chemical contaminating drains or watercourses by activating emergency shut-off valves or using bunding. Inform appropriate authorities immediately if spill enters waterways or sewers. Prevent chemical contaminating soil.	
Procedure for clean up:	Recover solid granules without generating dust. If diluted liquid spill then absorb with inert absorbent material such as sand or clay granules. Sweep absorbent material into an appropriate, labelled, waste container and dispose of at an approved facility. Cover the area with water and absorb. Prevent runoff entering waterways or contaminating the soil.	
Section 7: Handling and stor	age	
Safe handling:	Read label before use. Use only outdoors or in a well-ventilated area. Wear protective clothing; chemical goggles or a face shield, impervious gloves, overalls and boots when handling. Minimize dust generation and accumulation, avoid breathing dust when mixing. Wash splashes from skin immediately. Remove protective clothing and wash hands and face thoroughly before meals and after work. Wash contaminated clothing before re-use.	
Safe storage:	Keep out of reach of children. Keep container tightly closed when not in use. Store in secure, cool, well-ventilated area away from foodstuffs, seeds, fertilisers and human/animal health products. Storage must be in accordance with the current version NZS 8409 Management of Agrichemicals.	



Occu	pational exposure limits:	Ingredient	CAS No.	WES-TWA	WES-STEL
Biolo	gical limit value:	None set as of WorkS published November 2		on of WES and	BEI values,
Engir	neering controls:	Use only in well-ventil ventilation to keep airl limits.			
Resp	iratory protection:	Wear half or full mask applying spray.	fitted with par	ticle filter when	mixing or
Hand	l protection:	Elbow length, chemica neoprene or nitrile).	al resistant glo	ves (e.g. PVC,	rubber,
Eye p	protection:	Goggles with side pied	ces or a face s	hield.	
Skin	protection:	Overalls and PVC or r	ubber boots.		
Gene	eral hygiene:	Do not eat, drink or sr skin thoroughly with s Wash protective cloth	pap and water	before meals a	
Perso	onal Protection:	Further information or and related standards			otective gear
Secti	ion 9: Physical and chem	ical properties			
(a)	Appearance:	Homogenous, free-flo	wing, white-sli	ght yellow gran	ule.
(b)	Odour:	Odourless.			
(c)	Odour threshold:	Not available.			
(d)	pH:	3.0 – 8.0 ( 1% aqueou	is solution).		
(d)	Melting point/freezing	<b>N 1 1 1 1</b>			
(u) (e)		Not available.			
(e)	point:				
(e)	Initial boiling point and				
(e) (f)	Initial boiling point and boiling range:	Not applicable.			
(e) (f) (g)	Initial boiling point and boiling range: Flash point:	Not applicable. Not applicable.			
(e) (f) (g)	Initial boiling point and boiling range: Flash point: Flammability (solid,	Not applicable.			
(e) (f) (g) (h)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas):				
(e) (f) (g) (h)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas): Upper/lower	Not applicable.			
(e) (f) (g) (h)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas): Upper/lower flammability or	Not applicable. Non-flammable.			
(e) (f) (g) (h) (i)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas): Upper/lower flammability or explosive limits:	Not applicable. Non-flammable. Not available.			
(e) (f) (g) (h) (i)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapour pressure:	Not applicable. Non-flammable.			
(e) (f) (g) (h) (i) (j) (k)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapour pressure: Vapour density:	Not applicable. Non-flammable. Not available. No data available.			
(e) (f)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapour pressure:	Not applicable. Non-flammable. Not available. No data available. No data available.			
(e) (f) (g) (h) (i) (j) (k) (l)	Initial boiling point and boiling range: Flash point: Flammability (solid, gas): Upper/lower flammability or explosive limits: Vapour pressure: Vapour density: Relative density:	Not applicable. Non-flammable. Not available. No data available. No data available. 0.611			



(0)	Auto-ignition	
(0)	temperature:	Not available.
(p)	Decomposition	
,	temperature:	Not available.
(q)	Kinematic viscosity:	Not available.
(r)	Particle characteristics	Not applicable.
Sectior	10: Stability and react	ivity
Stability	of the substance:	Product is unlikely to react or decompose under normal conditions
Conditions to avoid:		of storage and use. Spray solutions of this product should be mixed, stored or applied using only stainless steel, aluminium, fibreglass, plastic or plastic lined containers. Avoid generation of dust and contact with strong oxidising agents and direct sunlight.
	atible materials: ous decomposition	Corrosive to mild steel, galvanised steel and zinc.
product		Oxide of carbon, oxides of nitrogen.
Sectior	n 11: Toxicological info	rmation
		Toxicity classifications determined by assessment of the
		components in the formulated mixture.
a)	Acute toxicity:	May be harmful if ingested, in contact with skin or inhaled.
b)	Aspiration hazard:	Not classified.
c)	Respiratory irritation:	Not classified.
d)	Skin corrosion /	
``	irritation:	Skin irritant.
e)	Serious eye damage /	Corrective to equilar tissue. May serve corrisus ave demons
f)	irritation:	Corrosive to ocular tissue. May cause serious eye damage.
f)	Respiratory or skin sensitisation:	Not classified.
a)	Germ cell	Not classified.
g)	mutagenicity:	Not classified.
h)	Carcinogenicity:	Not classified.
i)	Reproductive toxicity:	Not classified.
;) j)	Specific organ toxicity:	Not classified.
k)	Narcotic effects:	Not classified.
I)	Other adverse effects:	No information.
,	Toxicological	
,	information for	Acute oral LD <sub>50</sub> (rat): 2000 mg/kg bodyweight
	product:	Acute dermal LD <sub>50</sub> (rat): 2000 mg/kg bodyweight
		Acute inhalation LC <sub>50</sub> 4 hr (rat): >2.1 mg/l
Sectior	n 12: Ecological inform	ation
(a) (b)	Aquatic ecotoxicity: Soil ecotoxicity	Ecotoxicological classifications determined by assessment of the active ingredient. Toxic to aquatic life with long lasting effects. Not classified.



(c)	Terrestrial vertebrate			
(-1)	ecotoxicity:	Not classified.		
(d)	Terrestrial invertebrate ecotoxicity:	Not classified.		
(e)	Persistence and	Not classifica.		
(-)	degradability:	Absorption studies indi	cate glyphosate has very low mobility.	
		Average field half-life o	f glyphosate is 47 days.	
(f)	Potential to be			
(g)	bioaccumulative: Mobility in soil.	No indication product is bioaccumulative. Product is soluble in water.		
(9) (h)	Ecotoxicological			
<b>、</b> /	information for product			
	(based on similar	Aquatic toxicity –	Bluegill sunfish LC <sub>50</sub> (96 hr): 5.8-14 mg/L	
(1)	product)		Rainbow trout LC <sub>50</sub> (96 hr): 8.2-26 mg/L	
(i)	Ecotoxicological information for active		Fathead minnow $LC_{50}$ (96 hr): 9.4 mg/L	
	ingredient	Vertebrate toxicity –	LD <sub>50</sub> (Bobwhite quail): >3850 mg/kg (Not	
	(glyphosate):		toxic to birds)	
		Invertebrate toxicity –	LD <sub>50</sub> (Bee): >100 μg/bee (Not toxic to bees)	
Sectio	n 13: Disposal consider	rations		
Produc	ct disposal:	Dispose of this product	only by using according to the label or	
TIOUUC	n disposal.		emical disposal or similar approved	
		service. Do not allow material to contaminate ground water		
		system or surface wate	er.	
Contai	ner disposal:	Triple rinse container a	nd add residue to spray tank. Recycle	
		clean, empty container through Agrecovery if possible or bury in		
			o not use container for any other purpose.	
		empty container.	any water supply of stream with product of	
Sectio	n 14: Transport informa	ition		
UN nu	mber:	3077		
	oper shipping name:		HAZARDOUS SUBSTANCE, SOLID,	
		N.O.S. (contains glyph		
UN cla	SS:	9		
	g group:	III		
HAZCH		2Z		
	pollutant:	Yes		
Specia	Il precautions:	Must not be loaded with	h Class 1 (Explosives).	
		This product is classifie	ed as a Dangerous Good Class 9. Consult	
		•	le: Dangerous Goods 2005 and NZS	
		-	f Dangerous Goods on Land for more	
		information.		
Sectio	n 15: Regulatory inform	ation		
HSNO	:	Approved substance u	nder the HSNO Act 1996.	

#### SAFETY DATA SHEET Last revised: May-2024



Substance approval number: Tolerable exposure limit / environmental exposure limit: HSNO controls: Additional controls:	Approved substance under the H HSR100959; Reaper 688SG He No limits set. See <u>www.epa.govt.nz</u> Qualifications Tracking: Safety Data Sheet: Restricted to workplace only: Quantity that must be secured when unattended: Fire extinguishers Quantity for secondary containment and emergency response plan: Quantity for signage: Quantity for Location certificate	
	Records of use (3 kg or more applied to area within 24 hours) Quantity that requires management in accordance with HSW HS Regulations Hazardous Substances (Packaging) Notice 2017; Clause 9	- - UN Pack Group III
Additional information:	Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. Refer to WorkSafe for additional information on controls in the workplace; www.worksafe.govt.nz.	
ACVM: Registration number: Conditions of registration:	Registered under the Agricultural Compounds Veterinary Medicines Act 1997. P9050 See <u>www.foodsafety.govt.nz</u>	
Section 16: Other information	I	
Date of issue: Reason for reissue: Replaces:	9/05/2024 Review and update of SDS_and HSNO Controls. SDS issued 14 March 2019	
Information references:	Supplier Safety Data Sheet NZ EPA Approved hazardous substances databases. Workplace Exposure Standards and Biological Exposure Indices	
Abbreviations:	ACVM: Agricultural Chemicals and Veterinary Medicines Group Bw: Bodyweight. HSNO: Hazardous substances and New Organisms Act 1996 (HSNO Act) EPA: Environmental Protection Authority of New Zealand	



	CAS Number: Chemical Abstracts Service Number LD50: Lethal Dose 50% (Population) LC50: Lethal Concentration 50% (Population) WES-TWA: Workplace exposure standards – Time-weighted average WES-STEL: Workplace exposure standards – Short-term exposure limit
Personal Protection Standards:	The following Standards provide general advice regarding safety clothing and equipment: Respiratory equipment: <b>AS/NZS 1715</b> , Protective Gloves: <b>AS 2161</b> , Occupational Protective Clothing: <b>AS/NZS 4501</b> , Industrial Eye Protection: <b>AS1336</b> and <b>AS/NZS 1337</b> , Occupational Protective Footwear: <b>AS/NZS2210</b>

The data provided in this safety data sheet is based on current knowledge and experience. The purpose of this document is to describe the product in terms of its safety requirements. The above details do not imply any guarantee concerning composition, properties or performance of the product.