

#### 1. SUBSTANCE IDENTIFICATION

SUPPLIER NAME	AGPRO NZ Limited
SUPPLIER ADDRESS	10 Polaris Place, East Tamaki, Auckland 2013
	PO Box 58-963, Botany, Auckland 2163
SUPPLIER CONTACT DETAILS	09 273 3456 or freephone 0508 536 536
	www.agpro.co.nz
EMERGENCY PHONE	
POISON INFORMATION	0800 POISON (0800 764 766) 24 hours
CHEMICAL EMERGENCY	0800 CHEMCALL (0800 243 622) 24 hours
ACTIVE INGREDIENT(S) AND PRESENTATION	400 g/litre flufenacet and 200 g/litre diflufenican in the form of a suspension concentrate
USE	Herbicide

### 2. HAZARDS IDENTIFICATION

Classified as Hazardous according to the NZ Environmental Protection Authority criteria.		
GHS CLASSIFICATIONS	Acute oral toxicity Category 4 Skin sensitisation Category 1 Specific target organ toxicity (repeated exposure) Category 2 Hazardous to the aquatic environment acute Category 1 Hazardous to the aquatic environment chronic Category 1 Hazardous to soil organisms Hazardous to terrestrial vertebrates	
HSNO CLASSIFICATIONS	6.1D, 6.5B, 6.9B, 9.1A, 9.2A, 9.3C	
SIGNAL WORD	WARNING	
PICTOGRAMS		
HAZARD STATEMENTS	H302	Harmful if swallowed.
	H317	May cause an allergic skin reaction.
	H373	May cause damage to organs through prolonged or repeated exposure.
	H400	Very toxic to aquatic life (acute).
	H410	Very toxic to aquatic life with long lasting effects (chronic).
	H421	Very toxic to the soil environment.
	H433	Harmful to terrestrial vertebrates.
PREVENTION STATEMENTS	P102	Keep out of reach of children.

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#### 2. HAZARDS IDENTIFICATION

	P103	Read label before use
	P260	Do not breathe mist/vapours/spray.
	P264	Wash face and hands thoroughly after handling.
	P270	Do not eat, drink or smoke when using this product.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P273	Avoid unintended release to the environment.
	P280	Wear cotton overalls buttoned to the neck and wrist, a washable hat, impermeable gloves, and goggles or a face shield.
RESPONSE STATEMENTS	P101	If medical advice is needed, have product container or label on hand.
	P301 + P312	IF SWALLOWED: Call a POISON CENTRE or doctor/physician if you feel unwell.
	P302 + P352	IF ON SKIN: Wash with plenty of soap and water.
	P314	Get medical advice/attention if you feel unwell.
	P330	Rinse mouth.
	P333 + P313	If skin irritation or rash occurs: Get medical advice/attention.
	P362 + P364	Take off contaminated clothing and wash before re-use.
	P363	Wash contaminated clothing before reuse.
	P391	Collect spillage.
STORAGE STATEMENTS	See Section 7.	
DISPOSAL STATEMENTS	P501	Dispose of contents/containers in accordance with relevant regulations. See Section 13.

3. COMPOSITION/INFORMATION ON INGREDIENTS		
COMMON NAME	CAS NUMBER	CONCENTRATION %w/w
Flufenacet	142459-58-3	16.0 – 16.5 *
Diflufenican	83164-33-4	32 – 33**
Other ingredients	Proprietary	Balance to volume

\* equivalent to 200 g/L

\*\* equivalent to 400 g/L



#### 4. FIRST AID MEASURES

For advice call the National Poisons Centre 0800 POISON (0800 764 766) 24 hours or a doctor. If medical advice is needed have product container or label to hand.

EYE CONTACT	Rinse cautiously for several minutes. Remove contact lenses if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention.
SKIN (or hair) CONTACT	Remove contaminated clothing. Wash skin with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
INHALATION	Remove to fresh air and keep at rest in a position comfortable for breathing. Apply artificial respiration if not breathing. Call doctor if you feel unwell.
INGESTION	Do NOT induce vomiting. Rinse mouth. Call the POISON CENTRE or a doctor if you feel unwell.
NOTES TO DOCTOR	Treat symptomatically.
FIRST AID FACILITIES	Hand and eye wash facilities and safety shower should be available.

5. FIRE FIGHTING MEASURES		
EXTINGUISHING MEDIA	Alcohol resistant foam is preferred firefighting medium but if it is not available, standard foam can be used. Prevent extinguishing media from entering drains.	
THERMAL DECOMPOSITION PRODUCTS	Non-flammable. Thermal decomposition may produce toxic fumes and compound.	
SPECIAL FIRE FIGHTING METHODS	Self-contained breathing apparatus with full face-piece and protective clothing. Cool fire exposed containers with water spray.	
HAZCHEM CODE	3Z	

6. ACCIDENTAL RELEASE MEASURES		
PERSONAL PRECAUTIONS	Exclude non-essential people from the area. Wear Personal Protective Equipment (PPE) as detailed in Section 8 of the SDS.	
ENVIRONMENTAL PRECAUTIONS	Prevent product from entering waterways or drains.	
SPILLS AND DISPOSAL	<ul> <li>Spills may be slippery and should be cleaned up immediately. Contain spillage, then cover/absorb with inert, non-combustible absorbent material (attapulgite or similar).</li> <li>Collect and place in suitable sealed, labelled containers for disposal. Wash area with water and absorb with further inert material.</li> <li>Dispose of safely at an approved landfill.</li> <li>See Section 13 for details on disposal.</li> </ul>	



#### 7. HANDLING AND STORAGE

PRECAUTIONS FOR HANDLING	Carefully read the label before use. Use of safe work practices are recommended to avoid eye or skin contact and inhalation. Observe good personal hygiene, including washing hands and face before eating. Prohibit eating, drinking and smoking in contaminated areas. Contaminated clothing should not be allowed out of the workplace. This product must be under the control of a suitably qualified handler during mixing, loading and use.
STORAGE	Store in original container, tightly closed, in a secure, dry, cool and well-ventilated area and avoid direct sunlight. Store away from foodstuffs, fertilisers or seeds. Storage must be in accordance with NZS 8409 Management of Agrichemicals. Ensure containers are adequately labelled, protected from physical damage and sealed when not in use. Stores containing 100 litres or more of Difcan Xtra require secondary containment, signage and an emergency response plan.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS	Not established.
EYE PROTECTION	Wear eye protection.
RESPIRATORY PROTECTION	Wear respiratory protection (organic vapour cartridge(s) in combination with a P2 particulate filter when mixing/applying or there is risk of inhalation.
PROTECTIVE CLOTHING	Wear cotton overalls buttoned to the neck and wrist, a washable hat, impermeable gloves, and goggles or a face shield.
VENTILATION	Avoid inhalation. Use in a well-ventilated area.
HYGIENE PRECAUTIONS	Do not eat, drink or smoke while working with this product. Remove clothing that becomes soaked or contaminated and wash before reuse. Wash hands and face after handling before breaks and after work. Contaminated clothing should not be allowed out of the workplace.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE/STATE/ COLOUR	Beige liquid
ODOUR	Non-specific
ODOUR THRESHOLD	Not Available
pH (neat )	6.0 - 8.0
MELTING POINT/FREEZING POINT	Not Available
INITIAL BOILING POINT/BOILING RANGE	Not Available
FLASHPOINT	Not Applicable
FLAMMABILITY	Non flammable
UPPER/LOWER FLAMMABILITY LIMITS	Not applicable
VAPOUR PRESSURE	Not Available
VAPOUR DENSITY	Not Available
RELATIVE DENSITY	1.2 – 1.3



#### 9. PHYSICAL AND CHEMICAL PROPERTIES

SOLUBILITY	Forms suspension in water
OCTANOL/WATER PARTITION COEFFICIENT	Not Available
AUTOIGNITION TEMP	Not Applicable
DECOMPOSITION TEMPERATURE	Not Available.
KINEMATIC VISCOSITY	Not Available
PARTICLE CHARACTERISTICS	Not available

10. STABILITY AND REACTIVITY		
STABILITY	Stable under normal storage conditions in original container for two years.	
CONDITIONS TO AVOID	None known.	
MATERIALS TO AVOID	Strong acids/bases. Oxidising and reducing agents.	
HAZARDOUS DECOMPOSITION PRODUCTS	Hazardous polymerisation will not occur. Thermal decomposition may produce toxic fumes and compounds.	

11. TOXICOLOGICAL INFORMATION				
ACUTE EFFECTS	No toxicological data is available for the finished product.			
ORAL TOXICITY	Harmful if swallowed.			
	Flufenacet	LD50 (rat) 598 mg/kg	Difluenican	LD50 (rat) >5,000 mg/kg
DERMAL TOXICITY	Flufenacet	LD50 (rat) 2,000 mg/kg	Difluenican	LD50 (rate) 2,000 mg/kg
INHALATION TOXICITY	Flufenacet	LD50 (rat) >3.74 mg/litre	Difluenican	LD50 (rat) > 5.12 mg/litre
EYE CORROSION/IRRITANCY	Not classifie	ed		
SKIN CORROSION/IRRITANCY	Not classifie	ed.		
CHRONIC EFFECTS				
SENSITISATION	May cause	an allergic skin reaction. Flufena	cet is a contact s	ensitizer.
CARCINOGENICITY	No ingredie	nts with carcinogenic classificati	ons.	
REPRODUCTIVE TOXICITY	No ingredients with reproductive/developmental toxicity classifications.			
GERM CELL MUTAGENICITY	No ingredie	nts with mutagen classifications.		
ASPIRATION	No ingredie	nts identified with aspiration haza	ard.	
STOT/SE	No informat	ion		
STOT/RE	May cause	damage to organs through prolo	nged or repeated	exposure.
NARCOTIC EFFECTS	No information			



#### **12. ECOLOGICAL INFORMATION**

ΤΟΧΙΟΙΤΥ		quatic life and with long lasting effects. Very toxic to the soil Harmful to terrestrial vertebrates.	
PRECAUTIONS		ller: This product must be under the control of a suitably qualified handling, mixing, loading or application.	
		icide – very toxic to some plant species. This product must not be into or onto water. Avoid contamination of any water supply with oty container.	
	serious damag	drift hazard. Apply this product carefully. Spray drift may cause e to other desirable plants. Take all reasonable steps to ensure that does not cause any significant adverse effects to the environment plication area.	
	Take all reasonable steps to ensure the substance does not cause any significant adverse effects to the environment beyond the application area.		
	A 5 metre buffer zone must be observed for any area which may contain downwind non-target natural or planted vegetation.		
	For the protection of aquatic organisms, the following buffer zones must be observed from downwind water bodies:		
	- ≤ 300	ml/ha – 2 metres	
	- 301-400 ml/ha – 4 metres		
	- 401-500 ml/ha – 8 metres		
	Also see Section	on 15 for Additional HSNO Controls.	
ECOTOXICITY INFORMATION	Diflufenican	LC50 (Rainbow trout, 96 hr) 56 mg/litre	
		EC50 (freshwater algae) 0.00025 mg/litre	
	Flufenacet	LC50 (Lepomis macrochirus, 96 hr) 2.13 mg/litre	
		NOEC (Onchorhynchus mykiss, 21d) 0.2 mg/litre	
		EC50 (Daphnia magna, 48 hr) 30.9 mg/litre	
		NOEC (Daphnia magna, 21 d) 3.26 mg/litre	
		LC50 (Americamysis bahia, 96 hr) 1.78 mg/litre	
BIOACCUMMULATIVE	Yes		
READILY DEGRADABLE	Not biodegradable in water		

### 13. DISPOSAL CONSIDERATIONS

Do not contaminate streams, rivers or waterways with the chemical or the used container.		
PRODUCT DISPOSAL	Dispose of by using product as intended, according to the label directions. If this is not possible, contact your supplier or chemical recycling facility.	
CONTAINER DISPOSAL	Triple rinse container and add residue to spray tank. Return empty container to an Agrecovery collection point for disposal, or puncture and dispose of at an approved facility. Do NOT burn. Do not use the container for any other purpose.	



#### 14. TRANSPORT INFORMATION

CLASSIFIED AS A DANGEROUS GOOD ACCORDING TO LAND TRANSPORT RULE: DANGEROUS GOODS 2005, NZS 5433:2020, IMDG OR IATA.



	Land Transport (NZS 5433)	Sea Transport (IMDG/IMO)	Air Transport (IATA/ICAO)
UN Number	3082	3082	3082
Proper Shipping Name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (contains flufenacet 40%, diflufenican 20%)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (contains flufenacet 40%, diflufenican 20%)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S., (contains flufenacet 40%, diflufenican 20%)
Transport Hazard Class	9	9	9
Subsidiary Class	-	-	-
Packing Group	III	III	III
Hazchem	3Z	3Z	-
Marine Pollutant Status		Marine Pollutant	

This product must not be transported on a passenger service vehicle.



#### **15. REGULATORY INFORMATION**

ACVM REGISTRATION	Registered pursuant to the ACVM Act 1997, No. P009743. See MPI website for registration conditions <u>www.foodsafety.govt.nz</u>
HAZARDOUS SUBSTANCE APPROVAL CODE	Approved pursuant to the HSNO Act 1996, Approval Code HSR100012. See the EPA website for approval controls <u>www.epa.govt.nz</u>
RECORDS OF APPLICATION	If 3 kg or more of the substance is applied within 24 hours, in a place where the substance is likely to enter the air or water and leave the application area, a PCBU with management or control of the substance must ensure that a written record is kept of each application of the substance.
ADDITIONAL HSNO CONTROLS	This substance must not be applied at rates exceeding 500 mL of formulated product/ha per application (equivalent to 200 g flufenacet/ha and 100 g diflufenican/ha).
	This substance must not be applied to the same area more than once per year.
	A 5 m buffer zone must be observed for any area which may contain downwind non- target natural or planted vegetation.
	For the protection of aquatic organisms, the following buffer zones must be observed from downwind water bodies:
	8 m, when substance is applied at 401 – 500 mL/ha
	4 m, when substance is applied at 301 – 400 mL/ha
	2 m, when the substance is applied at ≤301 mL/ha
	The method of application of this substance is limited to ground based application only. Spraying equipment must be calibrated. This substance must be applied using medium or coarser spray droplets.
	<ol> <li>Ground-based methods of applying pesticides include, but are not limited to, application by ground boom, airblast or knapsack, and do not include aerial application methods.</li> <li>The quality of the spray is defined according to the American Society of Agricultural &amp; Biological Engineers (ASABE) droplet size classification scheme and is consistent with the British Crop Protection Council (BCPC) classification scheme, as presented in the New Zealand Standard: Management of Agrichemicals (NZS 8409:2004).</li> </ol>
	Do NOT apply this substance when wind speeds are less than 3 km/hr or more than 20 km/hr as measured at the application site.
	No person may apply this substance in a manner that results in adverse effects to non-target plants outside the application area.



#### **16. OTHER INFORMATION**

SDS ISSUE DATE	09 April 2023
SDS REVIEW DATE	April 2028
REFERENCES	Supplier SDS NZ Workplace Exposure Standard and Biological Exposure Indices (April 2022) NZ Chemical Classification Information Database NZ EPA Hazardous Substance Approvals and Group Standards Databases University of Hertfordshire: Pesticide Properties Database
ABBREVIATIONS	
ACVM	Agricultural Compounds and Veterinary Medicines
CAS Number	Chemical Abstract Service Number - used to uniquely identify chemical compounds
EPA	Environmental Protection Authority (New Zealand)
g/litre	Grams per litre
GHS	Globally Harmonised System
HSNO	Hazardous Substances and New Organisms
LC50	Lethal Concentration, 50%/Median Lethal Concentration
LD50	Lethal Dose, 50%/Median Lethal Dose
mg/m <sup>3</sup>	Milligrams per cubic metre
STEL	Short Term Exposure Limit
WES	Workplace Exposure Standard
IMDG/IMO	International Maritime Dangerous Goods/International Maritime Organisation
IATA/ICAO	International Air Transport Association/International Civil Aviation Organisation
TLV	Threshold Limit Value
TWA	Time Weighted Average
OEL	Occupational Exposure Limit

The data given here is based on current knowledge and experience. The purpose of this safety data sheet is to describe the products in terms of their safety requirements. The data does not signify any warranty with regard to the product's properties.

End of Safety Data Sheet