


### Section 1: Identification

Product name:	Clever 360
Other names:	360 g/litre clethodim as an emulsifiable concentrate.
Recommended use:	A selective post-emergent herbicide for grass weed control in broadleaf crops and forestry.
Manufacturer/Importer details:	AgStar New Zealand Pty Ltd 4 Putakitaki Street, Lincoln, Christchurch 7608
Distributor:	Farmlands Co-operative Society Limited 535 Wairakei Road, Burnside, Christchurch 8053 TEL 0800 200 600
24 hour emergency contact:	0800 CHEMCALL (0800 243622)
National Poisons Centre:	0800 POISON (0800 764766)

### Section 2: Hazard identification

HSNO Approval: Hazardous classification:	Product is classified as hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996. HSR100921 Flammable liquid Category 4, Aspiration hazard Category 1, Skin irritation Category 2, Eye irritation Category 2, Specific target organ toxicity (repeated) Category 2, Hazardous to soil organisms, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment (chronic) Category 3.
Pictograms:	
Signal word:	DANGER
Hazard statements:	H227 Combustible liquid H304: May be fatal if swallowed and enters airways.H315 Causes skin irritation. H315: Causes skin irritation H319 Causes serious eye irritation. H373 May cause damage to organs through prolonged or repeated exposure. H412 Harmful to aquatic life with long-lasting effects Harmful to soil organisms Harmful to soil organisms
Prevention statements:	P102 Keep out of reach of children. P103 Read label before use. P210 Keep away from flames and hot surfaces. No smoking.

Response statements:	<p>P260 Do not breath mist/vapours/spray.                  P264 Wash hands, arms and face thoroughly after handling.                  P270 Do not eat, drink or smoke when using this product.                  P273 Avoid release to the environment.                  P280 Wear protective gloves, protective clothing, eye and face protection.</p> <p>P101 If medical advice is needed, have product container or label at hand.</p> <p>P314 Get medical advice/attention.                  P301 + P310 IF SWALLOWED: Immediately call a POISON CENTRE or doctor/physician.                  P331 Do NOT induce vomiting.                  P314 Get medical advice/attention if you feel unwell.                  P302 + P352 IF ON SKIN: Wash with plenty of soap and water.                  P333 + P313 If skin irritation or rash: Get medical advice/attention.</p> <p>P362 Take off contaminated clothing and wash before reuse.                  P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.                  P337 + P313 If eye irritation persists: Get medical advice/attention.</p> <p>-</p> <p>P501 Dispose of product and containers in accordance with local Regulations. See Section 13 for details.</p>
Storage statements:	
Disposal statement:	Do not apply into or onto water.
Additional Label Requirements:	Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area.

**Section 3: Composition/information on ingredients**

Chemical identity of ingredients with health or environmental hazards:	<i>Ingredient</i>	<i>CAS No.</i>	<i>Proportion</i>
	Clethodim	99129-21-2	360 g/L
	Solvent naphtha dearomatised	64742-48-9	580 g/L
	Other ingredients	Proprietary	Up to 1L

**Section 4: First-aid measures**

First aid measures:	If medical advice is needed, have product container or label at hand. For advice contact National Poisons Centre 0800 POISON [0800 764 766] or a doctor.
Ingestion:	Do NOT induce vomiting. Rinse mouth. Call a POISON CENTRE or doctor for advice if you feel unwell.
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 or rash occurs get medical attention.

Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical attention.
First aid facilities:	Provide eye baths and safety showers close to areas where product contact or splashing may occur.
Advice to doctor:	Treat symptomatically.
<b>Section 5: Fire-fighting measures</b>	
Flammability: Appropriate extinguishing media:	Combustible liquid. Keep away from naked flame. No smoking. Carbon dioxide, dry chemical, foam or water fog.
Hazardous decomposition products:	May emit toxic and irritating fumes under fire conditions. Normal combustion forms carbon dioxide, water vapour and may produce oxides of nitrogen. Combustion may produce toxic compounds of chlorine. Incomplete combustion can produce carbon monoxide.
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
<b>Section 6: Accidental release measures</b>	
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 and collect 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:	Collect spill and absorb residues with inert absorbent material such as sand, soil or clay granules. Collect into an appropriate, labelled, waste container and dispose of at an approved facility. Prevent runoff entering waterways or contaminating the soil.
<b>Section 7: Handling and storage</b>	
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.. 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. Do not store near heat or flame. Store in original container tightly closed and in a locked, dry, cool area away from sources of ignition and foodstuffs. Store in accordance with the current version of NZS 8409 Management of Agrichemicals. Stores containing 100 litres are subject to signage, 1000 litres ore more require secondary containment and an emergency response plan. Stores containing 500 litres of <b>Clever 360</b> must have at least 2 fire extinguishers

**Section 8: Exposure controls/personal protection**

Occupational exposure limits:

<i>Ingredient</i>	<i>CAS No.</i>	<i>WES-TWA</i>	<i>WES-STEL</i>
Clethodim	99129-21-2	-	-

Biological limit value:

None set as of WorkSafe's 14<sup>th</sup> edition of WES and BEI values, published November 2023.

Engineering controls:

Use only in well-ventilated areas. If necessary, use local exhaust ventilation to keep airborne concentration below the exposure limits.

Respiratory protection:

Wear half or full mask fitted with vapour filter when mixing or applying spray.

Hand protection:

Elbow length, chemical resistant gloves (e.g. PVC, rubber, neoprene or nitrile).

Eye protection:

Goggles with side pieces or a face shield.

Skin protection:

Overalls and PVC or rubber boots.

General hygiene:

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.

Personal Protection:

Further information on specific types of personal protective gear and related standards is available in Section 16.

**Section 9: Physical and chemical properties**

- |     |   |                                      |
|-----|---|--------------------------------------|
| (a) | Appearance:                                   | Amber liquid.                        |
| (b) | Odour:  | Characteristic.                      |
| (c) | Odour threshold:                              | Not available.                       |
| (d) | pH:   | 5.0 – 7.0 ( 1% aqueous solution).    |
| (e) | Melting point/freezing point:                 | Not available.                       |
| (f) | Initial boiling point and boiling range:      | Not available                        |
| (g) | Flash point:                                  | No data available                    |
| (h) | Flammability (solid, gas):                    | Not applicable.                      |
| (i) | Upper/lower flammability or explosive limits: | Not available.<br>No data available. |
| (j) | Vapour pressure:                              | No data available.                   |
| (k) | Vapour density:                               | ca 1.03                              |
| (l) | Relative density:                             | Emulsifies in water.                 |
| (m) | Solubility:                                   |                                      |
| (n) | Partition coefficient: n-octanol/water:       | Not available.                       |

(o)	Auto-ignition temperature:	Not available.
(p)	Decomposition temperature:	Not available. Not available.
(q)	Kinematic viscosity:	Not applicable.
(r)	Particle characteristics	
<b>Section 10: Stability and reactivity</b>		
Stability of the substance:	Normally stable. Active may degrade in strong UV light.	
Conditions to avoid:	Oxidising agents, acids and alkali	
Incompatible materials:	None specified.	
Hazardous decomposition products:	Oxides of carbon, oxides of nitrogen and other unspecified compounds.	
<b>Section 11: Toxicological information</b>		
	Toxicity classifications determined by assessment of the components in the formulated mixture.	
a)	Acute toxicity:	Not classified.
b)	Aspiration hazard:	May be fatal if swallowed and enters airways.H315 Causes skin irritation.
c)	Respiratory irritation:	
d)	Skin corrosion / irritation:	Skin irritant.
e)	Serious eye damage / irritation:	May cause serious eye irritation.
f)	Respiratory or skin sensitisation:	Clethodim identified as non-skin sensitiser.
g)	Germ cell mutagenicity:	Not classified.
h)	Carcinogenicity:	Not classified.
i)	Reproductive toxicity:	Not classified.
j)	Specific organ toxicity:	May cause damage to organs through prolonged or repeated exposure.
k)	Narcotic effects:	Not classified.
l)	Other adverse effects:	No information.
m)	Toxicological information for Clethodim:	Oral toxicity: Low toxicity LD50 is 1360 mg/kg (Female rat) Dermal toxicity: Low toxicity LD50 > 5,000 mg/kg (rabbit) Inhalation: Low toxicity LC50 (4 hours) > 3.9 mg/L (, rat)
<b>Section 12: Ecological information</b>		
	Ecotoxicological classifications determined by assessment of the active ingredient.	
(a)	Aquatic ecotoxicity:	Harmful to aquatic life with long-lasting effects.
(b)	Soil ecotoxicity	Harmful to soil organisms.
(c)	Terrestrial vertebrate ecotoxicity:	Harmful to terrestrial vertebrates.

(d)	Terrestrial invertebrate ecotoxicity:	Not classified.
(e)	Persistence and degradability:	The product is not persistent
(f)	Potential to be bioaccumulative:	Octanol-water partition coefficient LogP = 4.14 (high)
(g)	Mobility in soil.	Soil organic carbon water partitioning coefficient Koc = 8000 (non-mobile)
(h)	Ecotoxicological information for active ingredient (Clethodim):	Acute Oral LD50 (Rat) 54 mg/kg LC50 (96 hr) (Rainbow Trout) 25 mg/l EC50 (48 hr) (Daphnia) >100 mg/l EC50 (72 hr) (Algae) >12 mg/l Acute Oral LD50 (Bee) >43 µg/bee
<b>Section 13: Disposal considerations</b>		
Product disposal:	Dispose of this product only by using according to the label or through an agricultural chemical disposal or hazardous substance service. Do not allow material to contaminate ground water system or surface water.	
Container disposal:	Triple rinse container and add residue to spray tank. Recycle clean, empty container through an agrichemical recycling service if possible or crush and bury in an approved landfill. Do not use container for any other purpose. Avoid contamination of any water supply or stream with product or empty container.	
<b>Section 14: Transport information</b>		
UN number:	None allocated	
UN proper shipping name:	None allocated	
UN class:	None allocated	
Packing group:	None allocated	
HAZCHEM:	None allocated	
Marine pollutant:	None allocated	
Special precautions:	This product is classified as a non- Dangerous Good. Consult the Land Transport Rule: Dangerous Goods 2005 and NZS 5433:2012 Transport of Dangerous Goods on Land for more information.	
<b>Section 15: Regulatory information</b>		
HSNO:	Approved substance under the HSNO Act 1996.	
Substance approval number:	HSR100921	
Tolerable exposure limit / environmental exposure limit:	No limits set.	
HSNO controls:	See <a href="http://www.epa.govt.nz">www.epa.govt.nz</a>	
	Qualifications	Yes
	Tracking:	No
	Safety Data Sheet:	Any quantity
	Restricted to workplace only:	No
	Quantity that must be secured when unattended:	-

	Fire extinguishers - Quantity for secondary containment and emergency response plan: 1000 L Quantity for signage: 1000 L Quantity for Location certificate - Records of use (3 kg or more applied to area within 24 hours) Yes Quantity that requires management in accordance with HSW HS Regulations with Hazardous Substances (Packaging) Notice 2017; Clause 9 - None allocated
Additional controls:	-
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; <a href="http://www.worksafe.govt.nz">www.worksafe.govt.nz</a> .
ACVM:	Registered under the Agricultural Compounds Veterinary Medicines Act 1997.
Registration number:	P10224
Conditions of registration:	See <a href="http://www.foodsafety.govt.nz">www.foodsafety.govt.nz</a>
<b>Section 16: Other information</b>	
Date of issue:	27/05/2026
Reason for reissue:	Corrected minor typos
Replaces:	Not applicable
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</b>

**2161**, Occupational Protective Clothing: **AS/NZS 4501**, Industrial Eye Protection: **AS1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS2210**

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.