

Section 1: Identification

Product name:	CYANOFLO®
Other names:	Suspension concentrate containing 500 g/L cyanazine
Recommended use:	Herbicide for use on specific agricultural crops.
Manufacturer/Importer details:	PGG Wrightson Limited 1 Robin Mann Place Christchurch Airport Christchurch New Zealand Phone: 03 372 0800 or 0800 102276
24 hour emergency contact:	0800 CHEMCALL (0800 243 622)
National Poisons Centre:	0800 POISON (0800 764 766)

Section 2: Hazard identification

Product is classified as hazardous according to the Hazardous Substances (Hazard Classification) Notice 2020 of the HSNO Act, 1996.

HSNO Approval: HSR000964

Hazardous classification: Acute oral toxicity Category 4, Reproductive toxicity Category 2, Specific target organ toxicity (repeated exposure) Category 1, Hazardous to terrestrial vertebrates, Hazardous to the aquatic environment acute Category 1, Hazardous to the aquatic environment chronic Category 1.

Pictograms:



Signal word: **DANGER**

Hazard statements: H302 Harmful if swallowed.
H361 Suspected of damaging fertility or the unborn child.
H372 Causes damage to organs through prolonged or repeated exposure.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long-lasting effects.
H432 Toxic to terrestrial vertebrates.

Prevention statements: P102 Keep out of reach of children.
P103 Read label before use.
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P260 Do not breathe mist/vapours/spray.
P264 Wash hands thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P273 Avoid release to the environment.
P281 Use personal protective equipment as required.

Response statements:	<p>P101 If medical advice is need, have product container or label at hand. P301 + P312 IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell. P330 Rinse mouth. P314 Get medical advice if you feel unwell. P308 + P313 IF exposed or concerned: Get medical advice. P391 Collect spillage.</p>
Storage statement/s:	H405
Disposal statement/s:	P501 Dispose of product and containers in accordance with local Regulations. See section 13 for more details.
Additional label Requirements:	Do not apply directly into or onto water. 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 w/w</i>
Cyanazine	21725-46-2	44 - 46*
Other ingredients	Trade secret	balance
* label concentration 500 g/L		

Section 4: First-aid measures

First aid measures:	If medical advice is needed, have product container or label at hand. If exposed or concerned, contact National Poisons Centre on 0800 POISON [0800 764 766] or a doctor.
Inhalation:	Remove person to fresh air and keep at rest in a position comfortable for breathing until recovered. Get medical advice if person feels unwell.
Ingestion:	Rinse mouth. Get medical advice if person feels unwell.
Skin contact:	Wash with soap and water. Get medical advice if irritation persists.
Eye contact:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice if irritation persists.
First aid facilities:	Provide eye baths and safety showers close to areas where product contact or splashing may occur.
Advice to doctor:	Treat symptomatically.

Section 5: Fire-fighting measures

Flammability:	Non-flammable. Not a fire or explosion hazard.
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Appropriate extinguishing media:	Water spray or fog, foam, dry powder, carbon dioxide (CO ₂). Do not use water jet. Ensure extinguishing media is contained and does not enter drains or waterways.								
Combustion products:	Smoke, oxides of carbon and nitrogen, hydrogen chloride, hydrogen cyanide, other cyanide decomposition products and other unidentified compounds.								
Special protective equipment and precautions for fire-fighters:	Wear protective equipment including self-contained breathing apparatus (SCBA).								
HAZCHEM code:	3Z								
Section 6: Accidental release measures									
Personal precautions:	Wear protective equipment; coveralls, boots, gloves, eye protection. Wear respiratory protection if there is a risk of contact with spray mist/aerosols.								
Environmental precautions:	Contain spill. Prevent from entering waterways, drains, sewers. Notify local authorities if contamination of waterway occurs.								
Procedure for clean up:	Contain and recover liquid into labelled container for re-use or disposal. Absorb residue or small spills with suitable material, e.g. sand, soil, vermiculite. Dispose of contaminated waste to approved landfill.								
Section 7: Handling and storage									
Safe handling:	Read label completely before use. Wear personal protective equipment. Use good personal hygiene practices. Remove protective equipment before rest or meal breaks. Wash hands thoroughly.								
Safe storage:	Keep out of reach of children. Keep container tightly closed when not in use. Store in cool, well-ventilated area away from foodstuffs, seeds, fertilisers and human/animal health products. Avoid exposure to temperatures range of <0°C or >40°C. Storage must be in accordance with the latest version of NZS 8409 Management of Agrichemicals.								
Section 8: Exposure controls/personal protection									
Occupational exposure limits:	<table border="1"> <thead> <tr> <th><i>Ingredient</i></th> <th><i>Exposure</i></th> <th><i>Form</i></th> <th><i>Ceiling</i></th> </tr> </thead> <tbody> <tr> <td>-</td> <td>-</td> <td>-</td> <td>-</td> </tr> </tbody> </table>	<i>Ingredient</i>	<i>Exposure</i>	<i>Form</i>	<i>Ceiling</i>	-	-	-	-
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-	-	-	-						
Biological limit value:	None set as of WorkSafe's 12 th edition of WES and BEI values, published November 2020.								
Engineering controls:	Use with adequate ventilation, i.e. outdoors.								
Respiratory protection:	Not required if used outdoors with adequate ventilation. If risk of inhalation, wear respirator fitted with suitable filter for particulates.								

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Hand protection:	Waterproof gloves, e.g. PVC, nitrile.
Eye protection:	Chemical goggles, safety glasses with side shields or face shield.
Skin protection:	Chemical resistant coveralls and closed in 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:	Off white liquid suspension
(b) Odour:	Characteristic, mild
(c) Odour threshold:	Not available
(d) pH:	6.0 – 8.0 (as 1% aqueous suspension)
(e) Melting point/freezing point:	Not available
(f) Initial boiling point and boiling range:	Not available
(g) Flash point:	Not flammable
(h) Flammability (solid, gas):	Not applicable
(i) Upper/lower flammability or explosive limits:	Not applicable
(j) Vapour pressure:	Not available
(k) Vapour density:	Not available
(l) Relative density:	1.12 (typical)
(m) Solubility:	Suspension in water
(n) Partition coefficient: n-octanol/water:	Not available
(o) Auto-ignition temperature:	Not available
(p) Decomposition temperature:	Not available
(q) Kinematic viscosity:	Not available
(r) Particle characteristics	Not applicable

Section 10: Stability and reactivity

Stability of the substance:	Stable under normal conditions of storage and use.
Conditions to avoid:	Avoid exposure to temperatures range of <0°C or >40°C.
Incompatible materials:	Not identified.
Hazardous decomposition products:	From combustion: Smoke, oxides of carbon and nitrogen, hydrogen chloride, hydrogen cyanide, other cyanide decomposition products and other unidentified compounds.

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Section 11: Toxicological information

	<p>Toxicity classifications determined by assessment of the components in the formulated mixture.</p>
(i) Acute toxicity:	Harmful if ingested.
(ii) Aspiration hazard:	Not classified.
(iii) Respiratory irritation:	Not classified.
(iv) Skin corrosion / irritation:	Not classified.
(v) Serious eye damage / irritation:	Not classified.
(vi) Respiratory or skin sensitisation:	Not classified.
(vii) Germ cell mutagenicity:	Not classified.
(viii) Carcinogenicity:	Not classified.
(ix) Reproductive toxicity:	Cyanazine is suspected of damaging fertility or the unborn child.
(x) Specific organ toxicity:	Repeated or prolonged exposure causes adverse effects to kidneys.
(xi) Narcotic effects:	Not classified.

Toxicological information
- Cyanazine

Oral LD₅₀ (rat): 288 mg/kg bodyweight [PPCB]
Oral LD₅₀ (rat): 1200 mg/kg bodyweight [CCID]
Dermal: LD₅₀: 2000 mg/kg bodyweight
Inhalation: LC₅₀ (4hr) 2.46 mg/L

Section 12: Ecological information

	<p>Ecotoxicological classifications determined by assessment of the components in the formulated mixture.</p>
(a) Aquatic toxicity:	Very toxic to aquatic life and with long lasting effects.
(b) Soil environment:	Not classified.
(c) Terrestrial vertebrate toxicity:	Hazardous to terrestrial vertebrates.
(d) Terrestrial invertebrate toxicity:	Not classified.
(e) Persistence and degradability:	Non-persistent.. DT ₅₀ 16 days.
(f) Potential to be bioaccumulative:	BCF is 157. Potential for concern.
(g) Mobility in soil:	Product forms suspension in water.

Ecotoxicological information:
- Cyanazine

Fish: *Rasbora heteromorpha* LC₅₀ (96h) 10 mg/L
Crustacea: *Daphnia magna* LC₅₀ (48h) 42 mg/L
Alga: *Selenastrum capricornutum* E₅₀ 0.02 mg/L
Aquatic plants: *Lemna gibba* EC₅₀ (7 days) 0.051 mg/L



Section 13: Disposal considerations															
Product disposal:	Dispose of this product only by using according to the label or through Agrecovery chemical disposal or similar approved service or to an approved landfill.														
Container disposal:	Recycle through Agrecovery if possible or appropriate recycling facility. Alternatively, 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.														
Section 14: Transport information															
UN number:	3082														
UN proper shipping name:	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID,														
UN class:	N.O.S. (CONTAINS CYANAZINE 50%)														
Packing group:	-														
Subsidiary risk:	III														
Environmental hazards:	-														
Special precautions:	-														
	This product is classified as a Dangerous Good Class 9. Consult the Land Transport Rule: Dangerous Goods 2005 and NZS 5433:2020 Transport of Dangerous Goods on Land for more information.														
Section 15: Regulatory information															
HSNO:	Approved substance under the HSNO Act 1996.														
HSNO approval number:	HSR000964														
Tolerable exposure limit / environmental exposure limit:	None set														
HSNO controls:	See www.epa.govt.nz														
Additional controls:	<table border="0"> <tr> <td>Safety Data Sheet:</td> <td>Any quantity</td> </tr> <tr> <td>Restricted to workplace only:</td> <td>No</td> </tr> <tr> <td>Quantity that requires management in accordance with HSW HS Regulations:</td> <td>1000 L</td> </tr> <tr> <td>Quantity for secondary containment and emergency response plan:</td> <td>100 L</td> </tr> <tr> <td>Quantity for signage:</td> <td>100 L</td> </tr> <tr> <td>Record of use if more that 3 kg applied to area within 24 hour period</td> <td>Yes</td> </tr> <tr> <td>Qualified handler required</td> <td>Yes</td> </tr> </table>	Safety Data Sheet:	Any quantity	Restricted to workplace only:	No	Quantity that requires management in accordance with HSW HS Regulations:	1000 L	Quantity for secondary containment and emergency response plan:	100 L	Quantity for signage:	100 L	Record of use if more that 3 kg applied to area within 24 hour period	Yes	Qualified handler required	Yes
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Record of use if more that 3 kg applied to area within 24 hour period	Yes														
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	<p>Label requirements;</p> <ul style="list-style-type: none"> Do not apply directly onto or into water. Take all reasonable steps to ensure that the substance does not cause any significant adverse effects to the environment beyond the application area. <p>Refer to HS Notices (www.epa.govt.nz) and HSW HS Regulations (www.worksafe.govt.nz)</p>														



ACVM: ACVM registration number: Conditions of registration:	Registered under the Agricultural Compounds Veterinary Medicines Act 1997. P9826 See www.foodsafety.govt.nz
Section 16: Other information	
Date of issue: Reason for reissue: Replaces:	10/09/2021 New product Not applicable
Information references:	Supplier Safety Data Sheet NZ EPA Approved hazardous substances with controls Workplace Exposure Standards and Biological Exposure Indices
Abbreviations:	ACVM: Agricultural Chemicals and Veterinary Medicines Group 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: AS/NZS 1715 , Protective Gloves: AS 2161 , Occupational Protective Clothing: AS/NZS 4501 , Industrial Eye Protection: AS1336 and AS/NZS 1337 , Occupational Protective Footwear: AS/NZS2210
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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.