



according to WHS Regulations

Printing date 25.11.2021 Revision: 24.11.2021

### 1 Identification

**Product Name: Cyan** 

Other Means of Identification: Mixture

Other Name: Sumitomo Chemical Australia Cyan, Sumitomo Cyan

**APVMA Approval Number:** 59486

Recommended Use of the Chemical and Restriction on Use: Plant growth regulator.

**Details of Manufacturer or Importer:** 

Grochem Australia Pty Ltd 550 Bourke Street Melbourne, VIC 3000

SUMITOMO CHEMICAL AUSTRALIA PTY LTD

Level 5, 51 Rawson Street Epping, NSW 2121 www.sumitomo-chem.com.au

Phone Number:

1800 777 068 (02) 8752 9000

Emergency telephone number: 1800 127 406 Email: reception@sumitomo-chem.com.au

# 2 Hazard(s) Identification

### **Hazardous Nature:**

Classified as Hazardous according to the Globally Harmonised System of Classification and Labelling of Chemicals (GHS) and Safe Work Australia criteria.

Classified as Dangerous Goods according to the Australian Code for the Transport of Dangerous Goods by Road and Rail (7th edition).



Skull and crossbones

Acute Toxicity (Oral) 3 H301 Toxic if swallowed.

Acute Toxicity (Dermal) 2 H310 Fatal in contact with skin.



Health hazard

Carcinogenicity 2 H351 Suspected of causing cancer.

Toxic To Reproduction 2 H361 Suspected of damaging fertility or the unborn child.

STOT RE 2 H373 May cause damage to the thyroid through prolonged or repeated

exposure.



Skin Corrosion/Irritation 1A H314 Causes severe skin burns and eye damage.

Serious Eye Damage/Irritation 1 H318 Causes serious eye damage.



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Skin Sensitisation 1	H317 May cause an allergic skin reaction.	
Aquatic Chronic 3	H412 Harmful to aquatic life with long lasting effects.	

# Signal Word Danger

### **Hazard Statements**

H301 Toxic if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to the thyroid through prolonged or repeated exposure.

H412 Harmful to aquatic life with long lasting effects.

### **Precautionary Statements**

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe dusts or mists.
P262	Do not get in eyes, on skin, or on clothing.
P264	Wash 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 release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P310	IF SWALLOWED: Immediately call a POISON CENTER/ doctor.
	Specific treatment (see on this label).
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water
	[or shower].
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
	present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P314	Get medical advice/attention if you feel unwell.
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
P333+P313	If skin irritation or rash occurs: Get medical advice/attention.

Dispose of contents/container in accordance with local/regional/national regulations.

# 3 Composition and Information on Ingredients

Store locked up.

### **Chemical Characterization: Mixtures**

P405

P501

Description: Mixture of substances listed below with nonhazardous additions.

Hazardous Con	Hazardous Components:	
		<60%
	Acute Toxicity (Oral) 3, H301; Acute Toxicity (Dermal) 2, H310; & Carcinogenicity 2, H351; Toxic To Reproduction 2, H361; STOT RE 2, H373; Skin Corrosion/Irritation 1A, H314; Serious Eye Damage/Irritation 1, H318; Skin Sensitisation 1, H317; Aquatic Chronic 3, H412	
CAS: 7664-38-2	Phosphoric acid	<1%
	Skin Corrosion/Irritation 1B, H314;	

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### **4 First Aid Measures**

#### Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. Seek medical attention immediately.

### **Skin Contact:**

In case of skin contact, immediately remove contaminated clothing and flush affected areas with running water. Seek medical attention immediately.

### **Eye Contact:**

In case of eye contact, rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention.

#### Ingestion:

If swallowed, do not induce vomiting. Do not give anything by mouth to an unconscious person. Seek medical attention immediately. If small amounts have been taken, administer activated charcoal, sodium sulphate, and large amounts of liquid orally. If large amounts have been taken, monitor circulatory functions and, if necessary, irrigate the stomach preventing aspiration and taking into account possible irritation to mucous membranes.

### Symptoms Caused by Exposure:

Inhalation: May be harmful if inhaled. May cause respiratory irritation.

Skin Contact: Fatal in contact with skin. Causes severe skin burns. May cause an allergic skin reaction. May cause 'cyanamide flush' including headache, dizziness, shortness of breath, and a rapid pulse.

Eye Contact: Causes serious eye damage. May cause lacrimation and redness.

Ingestion: Toxic if swallowed. May cause burns to the mouth and throat. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting.

### **5 Fire Fighting Measures**

Suitable Extinguishing Media: Use fire extinguishing methods suitable to surrounding conditions.

### **Specific Hazards Arising from the Chemical:**

Hazardous combustion products include oxides of carbon, oxides of nitrogen, ammonia, and hydrocarbons. Product is not flammable.

Containers close to fire should be removed only if safe to do so. Use water spray to cool fire exposed containers.

Prevent run-off from fire fighting measures from entering drains or water courses.

HAZCHEM Code: 2X

### **Special Protective Equipment and Precautions for Fire Fighters:**

When fighting a major fire wear self-contained breathing apparatus and protective equipment.

# 6 Accidental Release Measures

### Personal Precautions, Protective Equipment and Emergency Procedures:

Wear approved respiratory protection, chemical resistant gloves, protective clothing and safety boots. Evacuate all non-essential personnel from affected area. Do not breathe vapours. Ensure adequate ventilation.

### **Environmental Precautions:**

In the event of a major spill, prevent spillage from entering drains or water courses.

### Methods and Materials for Containment and Cleaning Up:

Stop leak if safe to do so and absorb spill with sand, earth, vermiculite or some other absorbent material. Collect the spilled material and place into a suitable container for disposal. Use only non-sparking tools.

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# 7 Handling and Storage

### **Precautions for Safe Handling:**

Use of safe work practices are recommended to avoid eye or skin contact and inhalation of vapours. Use only outdoors or in a well-ventilated area.

Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use. Provide eyewash fountains and safety showers in close proximity to points of potential exposure.

Do not drink alcohol for 24 hours before use and up to seven days after use.

### **Conditions for Safe Storage:**

Store in a cool, dry and well ventilated area. Keep container tightly closed when not in use. Keep at temperatures below 40 °C. Protect from heat, sparks, and other sources of ignition. Keep away from oxidising agents and acids.

# **8 Exposure Controls and Personal Protection**

Expo	sure Standards:
CAS:	420-04-2 Cyanamide
WES	TWA: 2 mg/m³ Sen
CAS:	7664-38-2 Phosphoric acid
WES	STEL: 3 mg/m³

# TWA: 1 mg/m³ Engineering Controls:

Ensure adequate ventilation of the working area, keeping airborne concentrations below occupational exposure standards.

### **Respiratory Protection:**

Use an approved vapour respirator where an inhalation risk exists. See Australian Standards AS/NZS 1715 and 1716 for more information.

#### **Skin Protection:**

PVC or rubber gloves. See Australian/New Zealand Standard AS/NZS 2161 for more information. When selecting gloves for use against certain chemicals, the degradation resistance, permeation rate and permeation breakthrough time should be considered.

Occupational protective clothing such as coveralls or a lab coat (depending on conditions in which it has to be used, in particular as regards the period for which it is worn, which shall be determined on the basis of the seriousness of the risk, the frequency of exposure to the risk, the characteristics of the workstation of each worker and the performance of the protective clothing). See Australian/New Zealand Standard AS/NZS 4501 for more information.

### **Eye and Face Protection:**

Eye and face protectors for protection against splashing materials or liquids. See Australian/New Zealand Standard AS/NZS 1337 for more information.

# 9 Physical and Chemical Properties

Appearance:

Form: Liquid
Colour: Blue
Odour: Offensive

Odour Threshold: No information available

pH-Value: 4-6

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Melting point/freezing point: -16 °C

Initial Boiling Point/Boiling Range: No information available No information available

Flammability: Not flammable

Auto-ignition Temperature: No information available Decomposition Temperature: No information available

**Explosion Limits:** 

Lower:
Upper:
No information available
No information available
Vapour Pressure:
No information available

Relative Density: 1.07

Vapour Density:No information availableEvaporation Rate:No information available

Solubility in Water: Soluble

Partition Coefficient (n-octanol/water): No information available Viscosity:

No information available

# 10 Stability and Reactivity

### Possibility of Hazardous Reactions:

Polymerisation is possible at pH > 5.

Decomposes violently by excess alkalisation.

### **Chemical Stability:**

Stable at ambient temperature and under normal conditions of storage and use.

Will gradually dimerize under ordinary conditions. Will gradually hydrolyze to form urea at pH < 2 or pH > 12.

### **Conditions to Avoid:**

Heat, sparks, open flames and other sources of ignition. Avoid temperatures above 40 °C.

**Incompatible Materials:** Oxidising agents and acids.

Hazardous Decomposition Products: Oxides of carbon, oxides of nitrogen, ammonia, and hydrocarbons.

### 11 Toxicological Information

### **Toxicity:**

LD50/LC	LD50/LC50 Values:	
CAS: 420	CAS: 420-04-2 Cyanamide	
Oral	LD50	125 mg/kg (rat)
	LD50	590 mg/kg (rabbit)
Dermal	LD50	84 mg/kg (rat)
CAS: 766	4-38-2 Pho	osphoric acid
Oral	LD50	1,530 mg/kg (rat)
	LD50	2,740 mg/kg (rabbit)
Inhalation	LC50/1 h	>850 mg/m³ (rat)

### **Acute Health Effects**

**Inhalation**: May be harmful if inhaled. May cause respiratory irritation.

#### Skin:

Fatal in contact with skin. Causes severe skin burns. May cause an allergic skin reaction. May cause 'cyanamide flush' including headache, dizziness, shortness of breath, and a rapid pulse.

Eye: Causes serious eye damage. May cause lacrimation and redness.

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### Ingestion:

Toxic if swallowed. May cause burns to the mouth and throat. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting.

Skin Corrosion / Irritation: Causes severe skin burns.

Serious Eye Damage / Irritation: Causes serious eye damage.

Respiratory or Skin Sensitisation: May cause an allergic skin reaction.

Germ Cell Mutagenicity: Based on classification principles, the classification criteria are not met.

Carcinogenicity: Suspected of causing cancer.

Reproductive Toxicity: Suspected of damaging fertility or the unborn child.

### **Specific Target Organ Toxicity (STOT) - Single Exposure:**

Based on classification principles, the classification criteria are not met.

### **Specific Target Organ Toxicity (STOT) - Repeated Exposure:**

May cause damage to organs through prolonged or repeated exposure.

Aspiration Hazard: Based on classification principles, the classification criteria are not met.

Chronic Health Effects: No information available

Existing Conditions Aggravated by Exposure: No information available

### Additional toxicological information:

The Australian Acceptable Daily Intake (ADI) for Cyanamide for a human is 0.002 mg/kg/day, set for the public for daily, lifetime exposure. This is based on the NOAEL of 0.2 mg/kg/day, the level determined to show no effects during long term exposure for the most sensitive indicators and the most sensitive species. (Ref: Australian Pesticides and Veterinary Medicines Authority, 'Acceptable Daily Intakes for Agricultural and Veterinary Chemicals', 2021).

# 12 Ecological Information

### **Ecotoxicity:**

### Aquatic toxicity:

Harmful to aquatic life with long lasting effects.

	CAS: 7664	-38-2 Phosphoric acid
ľ	EC50	270 mg/l (activated sludge inhibition)
	EC50/48 h	>100 mg/l (daphnia)
	EC50/72 h	>100 mg/l (scenedesmus subspicatus)
	LC50/96 h	138 mg/l (mosquito fish)

Persistence and Degradability: No data available on finished product.

Bioaccumulative Potential: No data available on finished product.

Mobility in Soil: No data available on finished product.

Other adverse effects: No further relevant information available.

## 13 Disposal Considerations

Disposal Methods and Containers: Dispose according to applicable local and state government regulations.

#### Special Precautions for Landfill or Incineration:

Please consult your state Land Waste Management Authority for more information.

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# 14 Transport Information

**UN Number** 

ADG, IMDG, IATA UN1760

**Proper Shipping Name** 

ADG, IMDG, IATA CORROSIVE LIQUID, N.O.S. (Cyanamide)

**Dangerous Goods Class** 

ADG Class: 8

**Subsidiary Risk:** 

Packing Group:

ADG, IMDG, IATA

Marine pollutant:

EMS Number: F-A,S-B

Hazchem Code: 2X
Special Provisions: 274
Limited Quantities: 1L

Packagings & IBCs - Packing Instruction: P001, IBC02

Portable Tanks & Bulk Containers - Instructions: T11

Portable Tanks & Bulk Containers - Special

**Provisions:** TP2, TP27

# 15 Regulatory Information

### **Australian Inventory of Industrial Chemicals:**

All ingredients are listed.

### Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Poison Schedule:

Poisons Schedule: 6

### **Australian Pesticides and Veterinary Medicines Authority:**

This product is registered with the Australian Pesticides and Veterinary Medicines Authority. APVMA number 59486.

### 16 Other Information

Date of Preparation or Last Revision: 22.11.2021

Prepared by: MSDS.COM.AU Pty Ltd www.msds.com.au

# Abbreviations and acronyms:

ADG: Australian Dangerous Goods

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

IARC: International Agency for Research on Cancer

STEL: Short Term Exposure Limit

TWA: Time Weighted Average

NES: National Exposure Standard (Safe Work Australia - Workplace Exposure Standards For Airborne Contaminants)

Acute Toxicity (Oral) 3: Acute toxicity – Category 3
Acute Toxicity (Oral) 4: Acute toxicity – Category 4
Acute Toxicity (Dermal) 2: Acute toxicity – Category 2

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Skin Corrosion/Irritation 1A: Skin corrosion/irritation – Category 1A Skin Corrosion/Irritation 1B: Skin corrosion/irritation – Category 1B

Serious Eye Damage/Irritation 1: Serious eye damage/eye irritation - Category 1

Skin Sensitisation 1: Skin sensitisation, Hazard Category 1

Carcinogenicity 2: Carcinogenicity – Category 2
Toxic To Reproduction 2: Reproductive toxicity – Category 2

STOT RE 2: Specific target organ toxicity (repeated exposure) - Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment, long-term (Chronic). Category 3

#### Disclaimer

This SDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals - July 2020"

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