

Safety Data Sheet according to WHS Regulations

Printing Date: 29.09.2022

Version Number: 1.0

Revision Date: 29.09.2022

1 Identification

Product identifier:Trade name: ***POLARSET NC 250*****Relevant identified uses of the substance or mixture, and uses advised against:**

Relevant identified uses of the substance or mixture: Concrete Admixtures

Identified uses advised against: No further relevant information available.

Details of the supplier of the safety data sheet:**Manufacturer/supplier:**

GCP Australia Pty. Ltd.
14 Colebard Street West
Archerfield, Queensland 4108
Australia

Further information obtainable from:

Tel. +61 7-3275-7500
Fax +61 7-3275-7501

APMSDS@gcpat.com

Emergency telephone number: After hours - Tel. No. 1800 039 008 (AU) or +61 7-3275-7500

2 Hazard(s) Identification

Classification of the substance or mixture:

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

Eye Dam. 1 H318 Causes serious eye damage.

Label elements:**GHS label elements** The product is classified and labelled according to the Globally Harmonized System (GHS).**Hazard pictograms**

GHS05 GHS07

Signal word Danger**Hazard-determining components of labelling:**

Calcium nitrate
Sodium thiocyanate
Calcium nitrite

Hazard statements

Harmful if swallowed.

Harmful if inhaled.

Causes serious eye damage.

Precautionary statements

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wash thoroughly after handling.

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

Wear eye protection / face protection.

IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

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IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER/doctor.

Rinse mouth.

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

Additional information:

Contact with acids liberates very toxic gas.

Information concerning particular hazards for human and environment:
Safety phrases:
Ingestion:

Large amounts of nitrates/nitrites may cause nausea, vomiting, cyanosis (due to methemoglobin formation), abnormally slow respiration, collapse and coma.

Description of Classification: Classified as hazardous according to the criteria of Safe Work Australia.

Other hazards:
Results of PBT and vPvB assessment:

PBT: Not applicable.

vPvB: Not applicable.

3 Composition and Information on Ingredients

Chemical characterization: Mixture:

Description: Mixture of substances listed below with non-hazardous additions.

Dangerous components:

10124-37-5	Calcium nitrate	10-<20%
	Eye Dam. 1, H318 Acute Tox. 4, H302	
540-72-7	Sodium thiocyanate	10-<20%
	Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Eye Irritation 2A, H319	
13780-06-8	Calcium nitrite	5-<10%
	Acute Tox. 3, H301 Eye Irritation 2A, H319	
140-07-8	Tetrahydroxyethylethylenediamine	3-<5%
	Eye Irritation 2A, H319	
102-71-6	Triethanolamine	1-<3%
	Skin Irrit. 2, H315; Eye Irritation 2A, H319; STOT SE 3, H335	

Additional information:

Ingredients determined not to be hazardous are present in concentrations that do not exceed the relevant cut-off concentrations as found from NOHSC publication 'List of Designated Hazardous Substances' or have been found NOT to meet the criteria of a hazardous substance as defined in the NOHSC publication 'Approved Criteria for Classifying Hazardous Substances'.

4 First Aid Measures

Description of first aid measures:
After inhalation:

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

IF INHALED: Call a doctor if you feel unwell.

After skin contact: Immediately rinse with water.

After eye contact: Rinse cautiously with water for several minutes.

After swallowing:

Rinse mouth.

Do NOT induce vomiting.

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Information for doctor:**Most important symptoms and effects, both acute and delayed:** Harmful if swallowed.**Indication of any immediate medical attention and special treatment needed:** No further relevant information available.**5 Fire Fighting Measures****Suitable extinguishing agents:**

This material, if dried to a solid powder-like form, will become an oxidizer, which may provide oxygen to combustible materials.

Special hazards arising from the substance or mixture: No further relevant information available.**Advice for firefighters:****Protective equipment:** Wear self-contained respiratory protective device.**Additional information:** Collect contaminated fire fighting water separately. It must not enter the sewage system.**6 Accidental Release Measures****Personal precautions, protective equipment and emergency procedures:**

Ensure adequate ventilation.

Wear protective equipment. Keep unprotected persons away.

Avoid contact with eyes.

Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system.**Methods and material for containment and cleaning up:**

Use neutralising agent.

Send for recovery or disposal in suitable receptacles.

Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

7 Handling and Storage**HANDLING****Precautions for safe handling:**

Prevent formation of aerosols.

Ensure good interior ventilation.

Do not mix directly with acidic materials. Do not mix directly with other admixtures. Hazardous gas may form.

Store in original containers.

Store in a well-ventilated place. Keep container tightly closed.

Use only outdoors or in a well-ventilated area.

Conditions for safe storage, including any incompatibilities:**STORAGE****Information about storage in one common storage facility:** No special measures required.**Further information about storage conditions:**

Store in a dry place.

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Protect from frost.

Store in cool, dry conditions in well sealed receptacles.

Keep cool.

Specific end use(s): No further relevant information available.

8 Exposure controls and personal protection

Additional information about design of technical facilities: No further data; see item 7.**Control parameters:****Ingredients with limit values that require monitoring at the workplace:****540-72-7 Sodium thiocyanate**

WES (Australia)	Long-term value: 5 mg/m ³ as CN, Sk
WEL (Great Britain)	Long-term value: 5 mg/m ³ as CN; Sk

102-71-6 Triethanolamine

WES (Australia)	Long-term value: 5 mg/m ³ Sen
TLV (USA)	Long-term value: 5 mg/m ³

Additional information: Based on the lists valid at the date of SDS creation.**Exposure controls:****PERSONAL PROTECTIVE EQUIPMENT****General protective and hygienic measures:**

The usual precautionary measures are to be adhered to when handling chemicals.

Do not add amines to this product. Cancer-causing nitrosamines may be formed. Direct contact with other admixtures, wash water and any other material causing the pH to fall below specification can result in the formation of NOX gas creating a hazardous situation. Nitric oxide (NO) is a colourless, odourless gas. Nitrogen dioxide (NO₂) is a reddish-brown gas with a highly pungent, bleach-like odour. Exposure can cause irritation to eyes and respiratory system and affect the central nervous and cardiovascular systems. Severe overexposure can be fatal. This hazard does not exist when mixed with other admixtures in concrete.

Respiratory protection:

Control exposure to ingredients with workplace control parameters if mentioned above. If no ingredients are listed, respiratory protection is generally not required.

If exposure limits are listed and may be exceeded, use approved respiratory protective equipment and filter type appropriate for the listed ingredients. (NIOSH, CEN, etc.).

Protection of hands: Protective gloves.**Material of gloves:**

Nitrile rubber.

PVC gloves.

Eye protection:

Safety glasses with side shield protection.



A face shield should also be worn if there is potential exposure to splash or spray.

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Body protection:

Use personal protective equipment as required.

Take off contaminated clothing and wash before reuse.

9 Physical and Chemical Properties

Information on basic physical and chemical properties:**GENERAL INFORMATION****Appearance:**

Form:	Liquid.
Colour:	Clear Red
Odour:	Characteristic.
Odour threshold:	Not determined.

pH-value (~) at 20 °C: 10

Change in conditions:-

Melting point/freezing point:	Undetermined.
Initial boiling point and boiling range:	Not determined.
Flash point:	Not applicable.

Flammability (solid, gas): Not applicable.

Ignition temperature: Not determined.

Decomposition temperature: Not determined.

Auto-ignition temperature: Not determined.

Explosive properties: Product does not present an explosion hazard.

EXPLOSION LIMITS

Lower:	Not determined.
Upper:	Not determined.

Vapour pressure: Not determined.

Density at 20 °C: 1.3 g/cm³

Vapour density: Not determined.

Evaporation rate: Not determined.

Solubility in/Miscibility with:-

Water: Fully miscible.

Partition coefficient: n-octanol/water: Not determined.

VISCOSITY

Dynamic: Not determined.

Kinematic: Not determined.

Molecular weight: Not determined.

Other information: No further relevant information available.

10 Stability and Reactivity

Reactivity:

Stable under normal conditions.

No further relevant information available.

Chemical stability:

Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.

Possibility of hazardous reactions

No dangerous reactions known.

No further relevant information available.

Conditions to avoid: No further relevant information available.

Incompatible materials: No further relevant information available.

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Hazardous decomposition products:

Carbon monoxide and carbon dioxide
Nitrogen oxides.

11 Toxicological Information**Information on toxicological effects:****ACUTE TOXICITY****LD/LC50 values relevant for classification:****10124-37-5 Calcium nitrate**

Oral	LD50	302 mg/kg (rat)
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13780-06-8 Calcium nitrite

Oral	LD50	283 mg/kg (rat)
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102-71-6 Triethanolamine

Oral	LD50	5,300 mg/kg (guinea pig)
		6,400 mg/kg (rat - male)
Dermal	LD50	>10,000 mg/kg (rabbit)
	LC50, 96h	11,800 mg/l (fish)

Primary irritant effect**Skin corrosion/irritation** No irritating effect.**Serious eye damage/irritation** Causes serious eye damage.**Inhalation:** Harmful if inhaled.**Ingestion:** Harmful if swallowed.**Additional toxicological information:****102-71-6 Triethanolamine**

NOEC/NOEL	16 mg/l (crustaceans) (Chronic NOEC)
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Other information :

The product was classified according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version.

12 Ecological Information**Toxicity:****AQUATIC TOXICITY****102-71-6 Triethanolamine**

EC50, 72h	512 mg/l (algae)
EC50, 48h	609.88 mg/l (daphnia magna)

Persistence and degradability: No further relevant information available.**BEHAVIOUR IN ENVIRONMENTAL SYSTEMS****Bioaccumulative potential:** No further relevant information available.**Mobility in soil:** No further relevant information available.**ADDITIONAL ECOLOGICAL INFORMATION****General notes:** Must not reach sewage water or drainage ditch undiluted or unneutralised.**Results of PBT and vPvB assessment:****PBT:** Not applicable.**vPvB:** Not applicable.

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Other adverse effects: No further relevant information available.**13 Disposal considerations****Waste treatment methods:****Recommendation:**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

Refer to State Land Waste Authority for disposal considerations.

UNCLEANED PACKAGING**Recommendation:** Disposal must be made according to official regulations.**14 Transport information**

UN-Number ADG, IMDG, IATA	Not Regulated
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UN proper shipping name ADG, IMDG, IATA	Not Regulated
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Transport hazard class(es) ADG, ADN, IMDG, IATA Class	Not Regulated
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Packing group ADG, IMDG, IATA	Not Regulated
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Environmental hazards:	Not applicable.
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Special precautions for user:	Not applicable.
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Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:	Not Regulated
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15 Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture:**

See Section 2 for hazard identification.

Australia: Priority Existing Chemicals

None of the ingredients is listed.

National regulations:**Other regulations, limitations and prohibitive regulations:** All ingredients are listed on AICS.**Registered in the international inventory lists:** AICS (Australia)**Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.**16 Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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Relevant phrases:

H301 Toxic if swallowed.
H302 Harmful if swallowed.
H312 Harmful in contact with skin.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H335 May cause respiratory irritation.

Department issuing SDS:

EHS Department,
Asia Pacific Region
SCIP, Canlubang, Calamba City, Laguna
Philippines 4028
Tel: +63 (02) 8236-6820 to 24

Contact:**The first date of preparation:** 29.09.2022**Number of revision times and the latest revision date:** 1.0 / 29.09.2022

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