

**Safety Data Sheet  
in accordance with HSNO**

Printing Date: 25.02.2021

Version Number: 1.0

Revision Date: 25.02.2021

## 1 Identification of the substance or mixture and of the supplier

**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

**Emergency telephone number:**

CHEMWATCH - 00 800 2436 2255 (free call)  
National Poison Centre - 0800 764-766 (0800 POISON)

## 2 Hazards 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 or 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.

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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.

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.

### 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 Substance according to the criteria of the New Zealand Hazardous Substance New Organisms legislation.

**HSNO Group Standard :** Construction Products (Subsidiary Hazard) Group Standard 2017

**HSNO Approval Number :** HSR002544

#### Other hazards:

#### Results of PBT and vPvB assessment:

**PBT:** Not applicable.

**vPvB:** Not applicable.

### 3 Composition/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 Irrit. 2A, H319 Aquatic Chronic 3, H412	
13780-06-8	Calcium nitrite	5-<10%
	Acute Tox. 3, H301 Eye Irrit. 2A, H319	
140-07-8	Tetrahydroxyethylethylenediamine	3-<5%
	Eye Irrit. 2A, H319	
102-71-6	Triethanolamine	1-<3%

### 4 First aid measures

#### Description of first aid measures:

##### After inhalation:

IF INHALED: Remove person to fresh air and keep 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.

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**After swallowing:**

Rinse mouth.

Do NOT induce vomiting.

**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

**Extinguishing media:****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.

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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.

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/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 <sup>3</sup> as CN, Sk
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WEL (Great Britain)	Long-term value: 5 mg/m <sup>3</sup> as CN; Sk
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##### 102-71-6 Triethanolamine

WES (New Zealand)	Long-term value: 5 mg/m <sup>3</sup>
WES (Australia)	Long-term value: 5 mg/m <sup>3</sup> Sen

**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 (NO<sub>2</sub>) 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.

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**Eye protection:**

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



Safety glasses with side shield protection.

**Body protection:**

Use personal protective equipment as required.

Take off contaminated clothing.

### 9 Physical and chemical properties

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

<b>Form:</b>	Liquid.
<b>Colour:</b>	Clear Red
<b>Odour:</b>	Characteristic.
<b>Odour threshold:</b>	Not determined.

**pH-value (~) at 20 °C:** 10

**Change in conditions:-**

<b>Melting point/freezing point:</b>	Undetermined.
<b>Initial boiling point and boiling range:</b>	Not determined.
<b>Flash point:</b>	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**

<b>Lower:</b>	Not determined.
<b>Upper:</b>	Not determined.

**Vapour pressure:** Not determined.

**Density at 20 °C:** 1.3 g/cm<sup>3</sup>

**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.

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### 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.

**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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### 12 Ecological information

**Toxicity:**
**AQUATIC TOXICITY**
**102-71-6 Triethanolamine**

EC50, 72h	512 mg/l (algae)
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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.

**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.

### UNCLEANED PACKAGING

**Recommendation:** Disposal must be made according to official regulations.

## 14 Transport information

<b>UN-Number</b> ADR, IMDG, IATA	Not Regulated
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<b>UN proper shipping name</b> ADR, IMDG, IATA	Not Regulated
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<b>Transport hazard class(es)</b> ADR, ADN, IMDG, IATA Class	Not Regulated
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<b>Packing group</b> ADR, IMDG, IATA	Not Regulated
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<b>Environmental hazards:</b>	Not applicable.
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<b>Special precautions for user:</b>	Not applicable.
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<b>Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:</b>	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.

#### HSNO Approval numbers

10124-37-5	Calcium nitrate	HSR001318
540-72-7	Sodium thiocyanate	HSR002807
102-71-6	Triethanolamine	HSR002785

**Registered in the international inventory lists:** NZIoC (New Zealand)

**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.

#### 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:** 04.08.2020

**Number of revision times and the latest revision date:** 1.0 / 25.02.2021

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