# SAFETY DATA SHEET

# ENVIROCore100+

## 1. Identification

**Product Name:** ENVIROCore100+

**Other names**: Ground Granulated Blast Furnace Slag, Slag cement, GGFBS

**Recommended Use:** Supplementary cementitious material.

**UN Number:** Not Applicable
**Proper Shipping Name:** Not Applicable


Supplier:
**Name**: Holcim NZ Ltd
**Address**: Unit 1, Show Place,
Addington
Christchurch, 8024

**Phone**: 0800 HOLCIM (465 246)
**Website**: www.holcim.co.nz


**Emergency Contacts**: Emergency Services (Fire, Ambulance, Police) – Dial 111
National Poisons Information Centre – 0800 764 766 (0800 POISON)
Company Contact – 0800 HOLCIM (465 246)

## 2. Hazard Identification

**Statement of Hazardous Nature**:
This product is not classified as hazardous according to the criteria of the *Hazardous Substances (Hazard Classification) Notice* 2020. Not classified as a Dangerous Good according to NZS 5433.

Other hazards: Dust of product can cause mechanical irritation to the eyes and respiratory system. Leachate may show alkalinity of pH 9 – 11, after long-term contact with water

## 3. Composition & Information on Ingredients

| Ingredient | CAS Number | Concentration (%) |
|---|---|---|
| MA.P.E. /S 530 NZ (trade name) | Mixture | <0.5 |
| Blast furnace slag | 65996-69-2 | to 100 |

*Granulated blast furnace slag is an amorphous substance, but the following ingredients may crystallise in part*

| | | |
|---|---|---|
| Melilite | - | Not confirmed |
| Calcium silicate | 1344-95-2 | Not confirmed |

## 4. First Aid Measures

New Zealand Poisons & Hazardous Chemicals National Information Centre
phone 0800 POISON – 0800 764 766

**Skin**: IF ON SKIN, wash with plenty of soap and water. Take off contaminated clothing and wash before re-use.

**Eyes**: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present. Continue rinsing. If symptoms such as irritation or redness occurs, seek medical attention.

**Ingestion**: IF SWALLOWED, rinse mouth and lips with water. Do NOT induce vomiting. If felling unwell, seek medical attention.

**Inhalation**: IF INHALED: Remove person to fresh air, away from dusty area, and keep comfortable for breathing. Call a POISON CENTRE or doctor/physician if feeling unwell or experiencing breathing difficulties.

**Advice to Doctor**: Treat symptomatically

## 5. Fire Fighting Measures

**Flammability**: Product is non-flammable.

**Extinguishing media**: Use appropriate for surrounding materials.

**Hazardous Combustion products**: Carbon and nitrogen oxides may be formed on fires.

**Fire Fighting Instructions**: Treat as per requirements for surrounding fires. Evacuate area and contact emergency services. Fight fire from safe distance and protected location. Approach from upwind.

Fire fighters should wear approved self-contained breathing apparatus and full protective clothing.

Prevent contamination to enter drains or water ways

## 6. Accidental Release Measures

**Spills**: This product is solid. Avoid inhalation of dust and contact with skin. Recover material by sweeping in collecting in suitable containers. Wet sweeping or vacuuming techniques can be used to minimise airborne dust generation. If airborne dust occurs, wear appropriate protective equipment (e.g., protective gloves, safety glasses, particulate respirator etc). Collect and place in sealable, labelled containers for later use or disposal.

**Environmental precautions**: Prevent spill from entering storm water/ sewer drains and watercourses. Leachate from this product may cause an increase in water pH if it flows into surrounding water areas (rivers, lakes etc). If product is spilt into a waterway notify the appropriate Regional Council**.**

## 7. Handling & Storage

Safe Handling

Respirable dust can be generated during processing, handling, and storage. Avoid breathing dust.
Ensure adequate ventilation if handling material indoors or use respiratory protection.
Use of safe work practices are recommended to avoid eye or skin contact. Wear protective gloves and eye/face protection.
Wash hands and any exposed skin thoroughly after handling.
Prohibit eating, drinking, and smoking in work areas.

Certified Handler: Not required

Storage

Store in a dry and well-ventilated area. Keep container / package tightly closed.
Avoid generation or occurrence of dust in storage areas.
Care should be made so that leachate does not directly flow into surrounding water bodies (e.g. rivers, lakes) as leachate may disrupt alkalinity levels.

## 8. Exposure Controls & Personal Protection

Exposure Standards

**Workplace Exposure Standards (WES):**

| Ingredient | CAS Number | TWA | STEL |
|---|---|---|---|
| Dust (not otherwise classified) | - | | |
| - Inhalable | | 10 mg/m$^3$ | - |
| - Respirable | | 3 mg/m$^3$ | - |

Data source: *Workplace Exposure Standards and Biological Indices (15th Edition, Feb 2025, WorkSafe)*

**Biological Exposure Indices (BEI)**: No biological exposure indices have been set for this product or its ingredients.

Engineering Controls

**Ventilation**: Ensure adequate ventilation – optimise natural airflows. Local exhaust ventilation should be used to prevent excessively dusty conditions and to maintain dust levels below exposure levels, where necessary. Work areas should be cleaned regularly.

Personal Protection (PPE)

**Eyes/Face**: Use tight fitting goggles or protective eyewear in dusty environments. Eye protection must comply with AS/NZS 1337.

**Skin**: Use impervious, abrasion- and alkali-resistant gloves and barrier creams, boots, and protective clothing to protect the skin from prolonged contact with wet material. The glove material must be impermeable and resistance to the product (in accordance with AS/NZS 2161). Consult your glove supplier for additional information on glove selection.

**Respiratory**: In dusty environments where engineering controls are inadequate to minimize dust exposure, the use of an approved Class P2 or P3 particulate respirator is recommended. At high dust levels greater protection may be required. Respiratory protection must comply with AS/NZS 1716 and be maintained in accordance with AS/NZS 1715.

## 9. Physical & Chemical Properties

**Appearance**: Granulated, ash white solid.
**Odour**: none
**Odour threshold**: Not applicable.
**pH:** Leachate may show alkalinity of pH 9-11, after long term contact with water**.**
**Boiling point**: No data available.
**Melting point**: Not applicable.
**Flash point**: Not applicable.
**Autoignition Temp:** Not applicable.
**Decomposition** Temp: Not applicable.
**Flammability**: Not classified as flammable.

**Lower Flammability Limit (LEL)**: Not applicable
**Upper Flammability Limit (UEL)**: Not applicable
**Vapour pressure:** Not applicable.
**Vapour density (Air =1)**: Not applicable.
**Specific gravity ($H_2O$=1)**: Not applicable.
**Solubility (water)**: Low with water
**Viscosity (dynamic)**: Not applicable.
**Viscosity (kinematic)**: Not applicable.
**Evaporation rate**: Not applicable
**Mass of unit volume**: 1.3 – 1.9 t/m$^3$
**Partition coefficient (n-octanol/water)**: No data available.

## 10. Stability & Reactivity

**Stability**: Stable under normal conditions of use and storage. Product may consolidate in case of long-term storage in the presence of water/moisture.

This product is not classified as a metal corrosive substance. The corrosion surface of aluminium and steel test specimen exposed to steel-making skag were max. 0.19 mm/year and 0.06 mm/year, respectively; not exceed 6.25 mm/year when tested in accordance with immersion corrosion test of metal, United Nations Manual of Test and Criteria, Part 3, Section 37 (*data provided in HNB003 SDS Granulated blast furnace slag, 5th edition, 29.10.2018*).

**Reactivity:** No data available.

**Conditions to avoid**: Unintended contact with water, excessive dust generation.

**Incompatible Materials**: No data available.

**Hazardous decomposition products**: No data available.

**Hazardous polymerisation**: No data available.

## 11. Toxicological Information

Health Effects / Symptoms of Exposure

**Acute Exposure (short term)**

**Overview:** Excessive exposure to airborne dust may reduce visibility and/or cause unpleasant deposits in the eyes, ears and nose. Prolonged and continuous exposure to excessive concentrations of dust of any kind may have an adverse pulmonary effect on some people.

**Inhalation**: May cause mechanical irritation to the respiratory system.

**Skin**: No data available.

**Eyes**: May cause mechanical irritation to the eyes.

**Ingestion**: No data available.

**Aspiration hazard**: Not classified.

***Chronic Exposure (long term)***

**Respiratory or Skin sensitisation**: Not classified.

**Mutagenicity**: Not classified.

**Carcinogenicity**: Not classified.

**Reproductive Toxicity**: Not classified.

**Specific Target Organ Toxicity (STOT)**: Not classified.

Toxicological Data

No toxicological data available for the product or its ingredients.

## 12. Ecological Information

The product forms an alkaline slurry when mixed with water which may affect the pH of aquatic systems if contact occurs in large quantities. Once set, product is persistent and has low degradability. Avoid release to the environment. Do not allow to enter drains or waterways.

**Persistence in environment** No data available.

**Mobility**: No data available.

**Bioaccumulation**: No evidence for bioaccumulation potential.

**Biodegradability**: Product is not biodegradable.

Ecotoxicological Data

| | | |
|---|---|---|
| Blast furnace slag | LC50 (*Leuciscus idus*, 96-hr) = | >100 mg/L |
| | EC50 (*Daphnia magna*, 48-hr) = | >100 mg/L |
| | LD50 (*Pseudokirchneriella subcapitata,* 72-hr) = | >100 mg/L |

Data source: *HNB003 SDS Granulated blast furnace slag, 5th edition, 29.10.2018*

## 13. Disposal Considerations

If practicable, spilled materials should be returned to the container for later use if it is not contaminated. Small amounts of material can be disposed of as trade waste or landfill in accordance with local authority guidelines. Bulk or contaminated products may be disposed of through an approved hazardous waste contractor. Disposal waste contractors must comply with the *New Zealand Hazardous Substances (Disposal) Notice 2017*. Containers/packaging may only be recycled if clean and free of residue. Prevent material from entering storm water and sewer drains.

## 14. Transport Information

Not classified as a Dangerous Good according to NZS 5433:2020, UN Model Regulations, IATA and/or IMDG.

**Proper Shipping Name**: Not applicable.

**UN Number**: Not applicable.

**DG Class**: Not applicable.

**Subsidiary Risk**: Not applicable.

**Packing Group**: Not applicable.

**Marine Pollutant**: Not applicable.

## 15. Regulatory Information

This product is not classified as hazardous according to the criteria of the *Hazardous Substances (Hazard Classification) Notice* 2020.

### HSNO Approval

All Ingredients (including mixture) are listed in the NZIoC.
**HSNO Group Standard:** Not applicable.

### Health and Safety at Work (Hazardous Substances) Regulations

**TEL or EEL:** None applied to this product or its ingredients.
**Location Certification**: Not required.
**Tracking**: Not required.
**Certified Handlers**: Not Required.
**Secondary containment**: Not required (solid).

## 16. Other Information

**Abbreviations / Terminology**:

| | |
|---|---|
| AS/NZS | Joint Australian New Zealand Standard |
| AS/NZS 1337 | Personal eye-protection |
| AS/NZS 1715 | Selection, use and maintenance of respiratory protective equipment |
| AS/NZS 1716 | Respiratory protective devices |
| AS/NZS 2161 | Occupational protective gloves |
| CAS # | Chemical Abstract Service number (a unique identifier for chemicals) |
| CCID | New Zealand Chemical Classification and Information Database |
| EEL | Environmental Exposure Limits |
| HSNO | (New Zealand) Hazardous Substances and New Organisms Act |
| IATA | International Air Transport Association |
| IMDG | International Maritime Dangerous Goods Code |
| $LD_{50}$ | Median lethal dose, being a statistically derived single dose of a substance that can be expected to cause death in 50 percent of animals. |
| NZIoC | New Zealand Inventory of Chemicals |
| NZS 5433 | Transport of Dangerous Goods on Land |
| TEL | Tolerable Exposure Limits |
| TWA | Time Weighted Average |
| STEL | Short Term Exposure Limit |

**Prepared with reference to:**

- *Hazardous Substances (Safety Data Sheets) Notice 2017,* published by Environmental Protection Authority, New Zealand.

SDS may be revised from time to time, please ensure you have a current copy.
**Current Version**: 19 March 2025, v1

**Disclaimer**:

This safety data sheet attempts to describe as accurately as possible the potential exposures associated with normal use of the product described herein. Health and safety precautions in the data sheet may not be adequate for all individuals and/or situations. Users have the responsibility to evaluate and use this product safely and to comply with all applicable laws and regulations.

Whilst the information contained in this document is based on data, which, to the best of our knowledge, was accurate and reliable at the time of preparation, no warranty or responsibility can be accepted by us for errors and omissions. The provision of this information should not be construed as a recommendation to use any of our products in violation of any patent rights or in breach of any statute or regulation. Users are advised to make their own determination as to the suitability of this information in relation to their particular purposes and specific circumstances. Since the information contained in this document may be applied under conditions beyond our control, no responsibility can be accepted by us for any loss or damage caused by any person acting or refraining from action as a result of this information.

--END OF SDS