

ENVIROCore 100

1. Identification

Product Names: ENVIROCore 100

UN Number: Not Applicable

Recommended Use:

Proper Shipping Name: Not Applicable

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

Supplier:

Name: Holcim NZ Ltd

Phone: 0800 HOLCIM (465 246)

Address: Unit 1, Show Place,
Addington
Christchurch, 8024

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 preparation is not classified as a health or environmental hazard according to the Hazardous Substances (Minimum Degrees of Hazard) Notice 2017.

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 (%)
Blast furnace slag	65996-69-2	100%
<i>Granulated blast furnace slag is an amorphous substance, but the following ingredients may crystallise in part</i>		
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

Inhalation: IF INHALED, remove victim to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell or experience breathing difficulties, seek medical advice.

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 and easy to do. Continue rinsing. If irritation persists, seek medical attention.

Ingestion: IF SWALLOWED, rinse mouth and lips with water. Do not induce vomiting. If you feel unwell, seek medical advice.

Advice to Doctor: Treat symptomatically.

5. Fire Fighting Measures

Flammability: Product is non-flammable.

Extinguishing media: Use appropriate for surrounding materials. Prevent contamination of drains or water ways.

Hazardous Combustion products: Carbon and nitrogen oxides may be formed in any fire.

Instructions to firefighters: None specified.

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).

7. Handling & Storage

Safe Handling

Avoid breathing dust.

Wear appropriate protective equipment to avoid eye and skin contact. Ensure adequate ventilation if handling material indoors, or use respiratory protection.

Wash hands and any exposed skin thoroughly after handling. Prohibit eating, drinking, and smoking in work areas.

Certified Handler: Not required.

Storage: 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

If you are unsure whether dust levels will exceed the exposure standards consult an occupational hygienist.

Workplace Exposure Standards (WES):

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

Biological Exposure Indices (BEI): No biological limit allocated.

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: If generation of airborne dust is likely, protective eyewear (e.g. Safety glasses with side shields, safety goggles) is recommended. Safety eyewear should comply with AS/NZS 1337.

Skin: If generation of excessive dust is likely, the use of protective gloves is recommended. Consult your glove supplier for additional information on glove selection. Gloves should be selected in accordance with AS/NZS 2161.

Respiratory protection: May be required dependant on use. If engineering controls are insufficient to control airborne dust exposure, the use of a suitable 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 a flammable substance.
Lower Flammability Limit (LEL): Not applicable

Upper Flammability Limit (UEL): Not applicable
Vapour pressure: Not applicable.
Vapour density (Air =1): Not applicable.
Specific gravity (H₂O=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/m³
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).

Conditions to avoid: Excessive dust generation.

Incompatible / Materials to avoid: 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: This product is a solid and aspiration hazards are not expected to occur.

Chronic Exposure (long term)

Respiratory or Skin sensitisation: Not classified.

Mutagenicity: Not classified to be a mutagen.

Carcinogenicity: Not classified as a carcinogen.

Reproductive Toxicity: Not classified as a reproductive toxicity substance/product.

Specific Target Organ Toxicity (STOT): Not classified as a reproductive toxin.

Toxicological Data

No toxicological data available for the product or its ingredients.

Biological Exposure Indices

No biological exposure indices allocated.

12. Ecological Information

Take necessary measure for the environment, including preventing material from entering waterways as leachate may influence the alkalinity of waterbodies in contact with water. No negative ecological effects from product are expected according to present state of knowledge.

Persistence in environment: No data available.

Biodegradability: No data available.

Bioaccumulation: No evidence for bioaccumulation potential.

Mobility: No data available

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Ecotoxicological Data

Blast furnace slag	LC50 (<i>Leuciscus idus</i> , 96-hr) =	>100 mg/L
	EC50 (<i>Daphnia magna</i> , 48-hr) =	>100 mg/L
	LD50 (<i>Pseudokirchneriella subcapitata</i> , 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 product 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 as to be non-hazardous. Prevent material from entering storm water and sewer drains.

14. Transport Information

Not classified as a Dangerous Good according to NZS 5433:200

15. Regulatory Information

HSNO Approval

HSNO Group Standard: Not Applicable, the product is considered non-hazardous.

All ingredients are listed on the NZIoC.

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)
EC50	Median effect concentration, being a statistically derived concentration of a substance that can be expected to cause an adverse reaction or reduction in growth/growth rate in 50 percent of organisms.
HSNO	(New Zealand) Hazardous Substances and New Organisms Act
LC50	Median lethal concentration, being a statistically derived concentration of a substance that can be expected to cause death in 50 percent of organisms.
NZIoC	New Zealand Inventory of Chemicals
NZS 5433	Transport of Dangerous Goods on Land
TWA	Time Weighted Average
WES	Workplace Exposure Standard

Prepared with reference to: *Hazardous Substances (Safety Data Sheets) Notice 2017* published by Environmental Protection Authority, New Zealand.

Current Version: 24 March 2021

Revision Information:

SDS may be revised from time to time, please ensure you have a current copy.

This revision: Updated overseas SDS to NZ requirements.

Previous revision dated: 29 October 2018

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.

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--END OF SDS