



# PRODUCT DATA SHEET

## Civil Grade Granulate

Product Code: GBF 007

### Definition

Blast furnace slag is the non-metallic product consisting essentially of silicates and aluminosilicates of calcium and other bases that is developed in a molten condition simultaneously with iron in a blast furnace.

Granulated blast furnace slag (GBFS) is a glassy, granular material.

### Process

Molten slag is passed through high volume water sprays, breaking the slag stream up into small droplets and cooling them so quickly that crystallisation is suppressed.

### Description

Civil grade granulate is a coarse sand-like material with a porous, amorphous structure and ranging from white to golden brown in colour. Reject granulate may contain large lumps and iron contamination.

### Applications

- ◆ Roadbase stabilisation
- ◆ Water treatment
- ◆ Civil fill
- ◆ Reprocessing into commercial products

### Advantages

- ◆ Cementitious properties
- ◆ Low chloride content
- ◆ Cost effective

### Environmental Value

- ◆ Effective utilisation of an industrial by-product
- ◆ Conserves natural resources and preserves natural landscape
- ◆ Reduces the need for landfill sites

### Chemical Properties

Blast furnace slag is composed of silicates and aluminosilicates, but for ease of reporting oxide equivalents are used and fall within the relatively narrow limits given below. Reject granulate is likely to contain high and variable quantities of metallic iron:

CONSTITUENT	SYMBOL	%
Iron Oxide	FeO	2
Calcium Oxide	CaO	38 – 43
Silicon Dioxide	SiO <sub>2</sub>	32 – 37
Aluminium Oxide	Al <sub>2</sub> O <sub>3</sub>	13 – 16
Magnesium Oxide	MgO	5 – 8
Titanium Dioxide	TiO <sub>2</sub>	1
Chloride Ion	Cl	<250ppm

### Typical Physical Properties

Bulk Density (Loose)	0.85-1.05 t/m <sup>3</sup>
Glass Content	>85%
Angle of Repose	Approx. 35°

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#### ASMS Disclaimer

This information set out above is of a general nature only and not intended to be relied upon for all applications. It does not take into account specific environmental impacts and these should be considered prior to the use of the product. The end users of the product should ensure that it is being used in a suitable manner in consultation with engineers and regulatory authorities.