PRODUCT DATA SHEET

Ecocem

Product Code: ECO 004

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 (GBF) slag is a glassy, granular material. Ecocem is produced when granulate is ground to a fine powder.

Ecocem complies with the requirements of AS 3582.2.

Process

Granulate is produced when 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.

Ecocem is produced when granulate is dried and ground with additives to a high fineness in a ball mill.

Ecocem is a fine light grey / white powder similar in appearance to white cement.

Applications

Replacement for Portland cement in concrete, road base, mine backfill and soil stabilisation applications.

Attributes

- Improves concrete resistance to sulfate and chloride attack and alkali silica reactivity.
- Low heat of hydration
- Light colour
- Dependable quality
- Enhanced workability

Chemical Properties

Blast furnace slag is composed of silicates and alumino-silicates, but for ease of reporting oxide equivalents are used and fall within the limits given below:

CONSTITUENT	SYMBOL	%
Iron Oxide	FeO	<1.3
Calcium Oxide	CaO	38 – 43
Silicon Dioxide	SiO_2	32 – 37
Aluminium Oxide	Al_2O_3	13 – 16
Magnesium Oxide	MgO	5 – 8
Titanium Dioxide	TiO_2	<1.5
Manganese Oxide	MnO	<0.5
Available alkali		<0.5
Sulfate	SO_3	2 – 3
Sulphur	S	<1.0
Chloride Ion	Cl	<250ppm

Typical Properties

PROPERTY	QUANTITY
Fineness	440 m^2/kg
45 micron residue	3%
28 day relative strength	95%
Specific Gravity	2.86
Bulk density	1200 kg/m^3

Technical Service and Customer Enquires

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