

PRODUCT DATA SHEET

20x10mm Concrete Aggregate

Product Code: ABF259

Definition

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

Air cooled blast furnace slag is a predominantly crystalline, solid rock-like material.

Description

Molten blast furnace slag is cooled in pits then dug, crushed and screened to produce a range of products including a graded 20x10mm concrete aggregate. Aggregates are aged in stockpiles and watered to achieve SSD for dispatch.

Advantages

- ◆ Economic alternative to natural aggregates
- ◆ Vesicular particle surface improves mechanical interlock
- ◆ Non-plastic, durable
- ◆ Fire and heat resistant

Typical Grading

SIEVE	% PASSING
26.5 mm	100
19.0 mm	97
13.2 mm	65
9.5 mm	33
4.75 mm	6
2.36 mm	4

Conforms to AS2758.1 – 20mm graded aggregate

Chemical Properties

Blast furnace slag is composed of silicates and aluminosilicates, primarily from the melilite group of minerals. Typical oxide analysis is shown in the following table:

CONSTITUENT	SYMBOL	%
Calcium Oxide	CaO	40
Silica	SiO ₂	35
Alumina	Al ₂ O ₃	14
Magnesia	MgO	6
Iron Oxide	FeO	0.4
Potassium Oxide	K ₂ O	0.4
Sulphur	S	0.8
Sodium Oxide	Na ₂ O	0.3

Typical Physical Properties

PROPERTY	VALUE
Bulk Density (t/m ³)	
Loose	1.16-1.26
Compacted	1.26-1.36
Particle Density (t/m ³)	
Apparent	2.67-2.77
SSD	2.48-2.58
Dry	2.38-2.48
Water Absorption (%)	3-6
Chlorides (%)	<0.02
Sulphates as SO ₃ (%)	<0.2
Alkali Reactivity	Innocuous
Sugar	Free
Iron Unsoundness	Free

Enquiries

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