

ANGASTON GGBFS

PRODUCT DESCRIPTION

Adbri Cement SA markets Ground Granulated Blast Furnace Slag (GGBFS), it is occasionally referred to as Neat Milled Slag (NMS).

GGBFS is manufactured by the grinding of dried granulated iron blast furnace slag (a by-product of the iron making process). The resultant powder produced from the milling process is light colour, and has bulk and relative density properties similar to Portland cement.

SUPPLY

Angaston GGBFS is supplied exclusively in bulk from our Angaston facility.

SPECIFICATION

Angaston GGBFS conforms to AS3582.2 Supplementary Cementitious Materials for use with Portland Cement. Part 2: Slag – Ground granulated iron blast furnace.

APPLICATIONS

Angaston GGBFS combines with the lime that is liberated during the hydration of Portland cement to form cementitious compounds.

GGBFS is widely used as a supplemental cementitious material (SCM) in premix concrete, mortars, and cement based products and grouts.

Depending on the mix design, GGBFS may impart the following benefits into a suitably designed concrete mix, when compared to mixes containing Type GP cement only:

- Reduced embodied carbon
- Improved workability and finishability
- Significantly improved durability
- Reduced heat of hydration
- Improved resistance to sulfate attack
- Improved resistance to chemical attack
- Higher later age strengths
- Lighter colour
- Improved resistance to alkali aggregate reaction

Angaston GGBFS can also be suitable as part of a binder system for stabilized soil applications including road stabilization and cement stabilized pavement materials.

TYPICAL PROPERTIES

Chemical Properties

Test	Units	AS 3582.2 Specification	Typical Values
Loss on Ignition	%	3.0 max	-0.35
Sulphide Sulphur (S)	%	1.5 max	0.8
Silicon Dioxide	%	=	35
Aluminium Oxide	%	18.0 max	12.6
Iron Oxide (Total)	%	1.5 max	0.6
Calcium Oxide	%	=	43.4
Magnesium Oxide	%	15.0 max	6.1
Sodium Oxide	%	=	0.3
Potassium Oxide	%	=	0.3
Manganese Oxide (MnO)	%	2.0 max	0.2
Sulfur Trioxide	%	-	1.8
Insoluble Residue	%	2.0 max	0.2

Physical Properties

Surface Area	m²/kg	-	416
45 μm	% passing	-	95
Specific Gravity	t/m³	-	2.86

HANDLING AND STORAGE

Transportation is in bulk road tankers or in bulk bags. GGBFS can be stored in concrete or steel silos and in bulk bags for at least one year. Protection against ingress of moisture must be observed throughout the handling and storage.

SAFETY INFORMATION

For safety information refer to the Safety Data Sheet for GGBFS.

CONTACT POINTS

For further information contact the Sales and Marketing Department at:

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