

## **Cement Test Certificate**

Lot 242 Russell Road East, Munster WA 6166 PO Box 38, Hamilton Hill WA 6963 T: +61 8 9411 1000 F: +61 8 9411 1150 Type GP General Purpose Cement

Final

ABN 50 006 673 470

Reportable Pr	operty Test	t Mothod	<b>Requirements of</b>	Pocult	
Minor Additional Constituents			Max 5 %	Nil	
Calcium Sulphate				<5 %	
Mineral Addition			Max 7.5 %	<7.5 %	
Ground Granulated Iron Blast-Furnace	Slag			Nil	
Clinker				>86.5 %	
Nominal Blend		Requirements		Result	
	Sample Date:	3/04/2018			
	Produced At: Sample Code:	Cockburn Cement, Kwinana Plant, WA B062af2			
Test Certificate Num	Test Certificate Number:	per: 180420			
Product Certified:		Type GP General Purpose Cement			

Reportable Property	Test Method	AS3972	Result
3 Day Strength	AS2350.11	N/R	43.4 MPa
7 Day Strength	AS2350.11	Min 35.0 MPa	52.2 MPa
28 Day Strength	AS2350.11	Min 45.0 MPa	63.8 MPa
Initial Set Time	AS2350.4	Min 45 min	135 min
Final Set Time	AS2350.4	Max 360 min	210 min
Soundness	AS2350.5	Max 5 mm	1 mm
Sulfuric Anhydride content (SO <sub>3</sub> )	AS2350.2	Max 3.5 %	3.4 %
Chloride Ion	BH-TM-0507	Max 0.10 %	0.012 %
Other Properties			
SiO <sub>2</sub>	AS2350.2	N/R	20.1 %
Al <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	5.5 %
Fe <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	2.8 %
CaO	AS2350.2	N/R	63.1 %
MgO	AS2350.2	N/R	1.6 %
Na <sub>2</sub> O Equivalent	AS2350.2	N/R	0.5 %
Loss on Ignition	AS2350.2	N/R	1.9 %
Fineness Index	AS2350.8	N/R	410 m²/kg
Normal Consistency	AS2350.3	N/R	30.8 %

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## REMARKS

These test result apply specifically to the sample as received at the Adelaide Brighton Cement Birkenhead Laboratory (Accreditation number: 252), 62 Elder Rd Birkenhead SA 5015.

This despatch grab sample complies to the requirements of AS3972:2010, Type GP Cement. N/R = No Requirement



Accredited for compliance with ISO/IEC 17025 - Testing. The results of the tests, calibrations and/or measurements included in this document are traceable to Australian/national standards.

**Approved Signatory** F. Pope

Issue Date:

30/05/2018