

## **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

	Product Certified: Test Certificate Number: Despatched From:	Type GP General Purpose Cement 180195 Cockburn Cement, Port Hedland Plant, WA		
Sample Code:		B061254		
	Sample Date:	1/02/2018		
Nom	inal Blend	Requirements	Result	
Clinker			>86.5 %	
Ground Granulated Iron Blas	t-Furnace Slag		Nil	
Mineral Addition		Max 7.5 %	<7.5 %	
Calcium Sulphate			<5 %	
Minor Additional Constituen	ts	Max 5 %	Nil	
		Denvinente ef		

Departable Dranauty	Test Methed	<b>Requirements of</b>	Result
Reportable Property	Test Method	AS3972	
3 Day Strength	AS2350.11	N/R	41.2 MPa
7 Day Strength	AS2350.11	Min 35.0 MPa	48.7 MPa
28 Day Strength	AS2350.11	Min 45.0 MPa	58.4 MPa
Initial Set Time	AS2350.4	Min 45 min	75 min
Final Set Time	AS2350.4	Max 360 min	135 min
Soundness	AS2350.5	Max 5 mm	2 mm
Sulfuric Anhydride content (SO <sub>3</sub> )	AS2350.2	Max 3.5 %	2.8 %
Chloride Ion	BH-TM-0507	Max 0.10 %	0.022 %
Other Properties			
SiO <sub>2</sub>	AS2350.2	N/R	19.1 %
Al <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	5.2 %
Fe <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	3.2 %
CaO	AS2350.2	N/R	63.9 %
MgO	AS2350.2	N/R	1.6 %
Na₂O Equivalent	AS2350.2	N/R	0.5 %
Loss on Ignition	AS2350.2	N/R	2.2 %
Fineness Index	AS2350.8	N/R	335 m²/kg
Normal Consistency	AS2350.3	N/R	27.8 %

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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:

19/03/2018