

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 h Early Strength Cement (Creme)

Final

ABN 50 006 673 470

Product Certified:	Type HE High
Test Certificate Number:	190012
Produced At:	Cockburn Cem
Sample Code:	B0685ab
Sample Date:	6/11/2018

190012 Cockburn Cement, Kwinana Plant, WA B0685ab 6/11/2018

Nominal Blend	Requirements	Result
Clinker		>86.5 %
Ground Granulated Iron Blast-Furnace Slag		Nil
Mineral Addition	Max 7.5 %	<5 %
Calcium Sulphate		<5 %
Minor Additional Constituents	Max 5 %	Nil

Reportable Property	Test Method	Requirements of	Result
		AS3972	
3 Day Strength	AS2350.11	Min 25.0 MPa	41.5 MPa
7 Day Strength	AS2350.11	Min 40.0 MPa	51.9 MPa
28 Day Strength	AS2350.11	N/R	59.3 MPa
Initial Set Time	AS2350.4	Min 45 min	105 min
Final Set Time	AS2350.4	Max 360 min	180 min
Soundness	AS2350.5	Max 5 mm	1 mm
Sulfuric Anhydride content (SO ₃)	AS2350.2	Max 3.5 %	3.3 %
Chloride Ion	BH-TM-0507	Max 0.10 %	0.008 %
Other Properties			
SiO ₂	AS2350.2	N/R	22.0 %
Al ₂ O ₃	A\$2350.2	N/R	3.7 %
Fe ₂ O ₃	AS2350.2	N/R	0.4 %
CaO	AS2350.2	N/R	64.7 %
MgO	AS2350.2	N/R	1.1 %
Na ₂ O Equivalent	AS2350.2	N/R	0.6 %
Loss on Ignition	AS2350.2	N/R	4.0 %
Fineness Index	AS2350.8	N/R	420 m²/kg
Normal Consistency	AS2350.3	N/R	27.7 %
Brightness (L)*	MU-TM-2614	N/R	87

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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 HE Cement.

*NATA accreditation 252 does not cover the performance of this service.

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:

2/01/2019