

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

Final

ABN 50 006 673 470

Type GP General Purpose Cement

Test Certificate Number:

Product Certified:

190120 **Produced At:** Cockburn Cement, Kwinana Plant, WA

Sample Code: B0692e5 Sample Date: 6/12/2018

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

Reportable Property	Took Mothod	Requirements of	Result
	Test Method	AS3972	
3 Day Strength	AS2350.11	N/R	42.0 MPa
7 Day Strength	AS2350.11	Min 35.0 MPa	52.2 MPa
28 Day Strength	AS2350.11	Min 45.0 MPa	64.1 MPa
Initial Set Time	AS2350.4	Min 45 min	150 min
Final Set Time	AS2350.4	Max 360 min	180 min
Soundness	AS2350.5	Max 5 mm	0 mm
Sulfuric Anhydride content (SO ₃)	AS2350.2	Max 3.5 %	3.4 %
Chloride Ion	BH-TM-0507	Max 0.10 %	0.015 %
Other Properties			
SiO ₂	AS2350.2	N/R	20.6 %
Al_2O_3	AS2350.2	N/R	5.5 %
Fe_2O_3	AS2350.2	N/R	2.6 %
CaO	AS2350.2	N/R	63.2 %
MgO	AS2350.2	N/R	1.7 %
Na₂O Equivalent	AS2350.2	N/R	0.6 %
Loss on Ignition	AS2350.2	N/R	2.0 %
Fineness Index	AS2350.8	N/R	415 m²/kg
Normal Consistency	AS2350.3	N/R	29.9 %

This document shall not be reproduced except in full.

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

Issue Date: 26/02/2019