

## **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 uncement.com.au

Final

ABN 50 006 673 470

Product Certified:	Type HE High Early Strength Cement (Crei
Test Certificate Number:	170296
Produced At:	Cockburn Cement, Kwinana Plant, WA
Sample Code:	B061cde
Sample Date:	27/02/2018

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

Panartahla Dronarty	Test Method	<b>Requirements of</b>	Decult	
Reportable Property	Test Method	AS3972	Result	
3 Day Strength	AS2350.11	Min 25.0 MPa	40.9 MPa	
7 Day Strength	AS2350.11	Min 40.0 MPa	52.1 MPa	
28 Day Strength	AS2350.11	N/R	63.0 MPa	
Initial Set Time	AS2350.4	Min 45 min	105 min	
Final Set Time	AS2350.4	Max 360 min	165 min	
Soundness	AS2350.5	Max 5 mm	1 mm	
Sulfuric Anhydride content (SO <sub>3</sub> )	AS2350.2	Max 3.5 %	3.2 %	
Chloride Ion	BH-TM-0507	Max 0.10 %	0.010 %	
Other Properties				
SiO <sub>2</sub>	AS2350.2	N/R	22.0 %	
Al <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	3.7 %	
Fe <sub>2</sub> O <sub>3</sub>	AS2350.2	N/R	0.4 %	
CaO	AS2350.2	N/R	64.6 %	
MgO	AS2350.2	N/R	1.0 %	
Na <sub>2</sub> O Equivalent	AS2350.2	N/R	0.6 %	
Loss on Ignition	AS2350.2	N/R	3.4 %	
Fineness Index	AS2350.8	N/R	390 m²/kg	
Normal Consistency	AS2350.3	N/R	28.5 %	
Brightness (L)*	MU-TM-2614	N/R	87	

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 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:

12/04/2018