



ABN 50 006 673 470

# Test Certificate

Final

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  
[www.cockburncement.com.au](http://www.cockburncement.com.au)

**Product Certified:** Ground Granulated Blast Furnace Slag  
**Test Certificate Number:** 190091  
**Despatched From:** Cockburn Cement, Port Hedland Plant, WA  
**Sample Code:** b068ca4  
**Sample Date:** 5/11/2018

Nominal Blend	Requirements	Result
Ground Granulated Iron Blast-Furnace Slag		>95 %
Calcium Sulphate		<5 %

Reportable Property	Test Method	Requirements of AS3582.2	Result
Alumina (Al <sub>2</sub> O <sub>3</sub> )	AS2350.2	Max 18.0 %	16.9 %
Total Iron (FeO)	AS2350.2	N/R	0.4 %
Magnesia (MgO)	AS2350.2	Max 15.0 %	10.8 %
Total Alkali (Na <sub>2</sub> O Equivalent)	AS2350.2	N/R	0.6 %
Manganese (MnO)	ASTM C114	N/R	0.6 %
Sulfate (as SO <sub>3</sub> ) content	AS3583.8	N/R	0.3 %
Sulfide Sulfur (S)	AS3583.7	Max 1.5 %	0.7 %
Chloride Ion Content	AS3583.13	Max 0.1 %	0.009 %
Loss on Ignition	AS3583.3	N/R	-1.0 %
Insoluble Residue	AS3583.14	N/R	0.1 %
45 µm Residue	AS3583.1	N/R	97 % passing
Relative Density	AS3583.5	N/R	2.92
Relative Water Requirement	AS3583.6	N/R	99 %
Strength Index	AS3583.6	N/R	101 %

### Other Properties

SiO <sub>2</sub>	AS2350.2	N/R	30.7 %
CaO	AS2350.2	N/R	36.5 %
Fineness Index	AS2350.8	N/R	420 m <sup>2</sup> /kg

*This document shall not be reproduced except in full.*

### REMARKS

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

For Relative Water and Strength Index testing the reference control used is Birkenhead GP code B069db0.

This despatch grab sample complies to the requirements of AS3582.2:2016, Ground Granulated Blast Furnace Slag.

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: 11/02/2019