



an ADBRI company  
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:** 240162  
**Customer:** Cockburn Cement, Kwinana Plant, WA  
**Sample Code:** B0a49e0  
**Sample Date:** 10/12/2023

| Nominal Blend                             | Requirements | Result |
|---|--------------|--------|
| Ground Granulated Iron Blast-Furnace Slag |              | >95 %  |
| Calcium Sulphate                          |              | <5 %   |
| Other Additions                           |              | <0.5 % |

| Reportable Property                         | Test Method | Requirements of AS3582.2 | Result       |
|---|-------------|--------------------------|--------------|
| Alumina (Al <sub>2</sub> O <sub>3</sub> )   | AS2350.2    | Max 18.0 %               | 11.8 %       |
| Total Iron (FeO)                            | AS2350.2    | N/R                      | 0.7 %        |
| Magnesia (MgO)                              | AS2350.2    | Max 15.0 %               | 6.6 %        |
| Total Alkali (Na <sub>2</sub> O Equivalent) | AS2350.2    | N/R                      | 0.5 %        |
| Manganese (MnO)                             | ASTM C114   | N/R                      | 0.2 %        |
| Sulfate (as SO <sub>3</sub> ) content       | AS3583.8    | N/R                      | 2.2 %        |
| Sulfide Sulfur (S)                          | AS3583.7    | Max 1.5 %                | 0.6 %        |
| Chloride Ion Content                        | AS3583.13   | Max 0.1 %                | 0.010 %      |
| Loss on Ignition                            | AS3583.3    | N/R                      | 0.4 %        |
| Insoluble Residue                           | AS3583.14   | N/R                      | 0.8 %        |
| 45 µm Residue                               | AS3583.1    | N/R                      | 95 % passing |
| Relative Density                            | AS3583.5    | N/R                      | 2.83         |
| Relative Water Requirement                  | AS3583.6    | N/R                      | 101 %        |
| Strength Index                              | AS3583.6    | N/R                      | 81 %         |

### Other Properties

|                  |              |     |                        |
|------------------|--------------|-----|------------------------|
| SiO <sub>2</sub> | AS2350.2     | N/R | 32.6 %                 |
| CaO              | AS2350.2     | N/R | 42.6 %                 |
| Fineness Index   | AS/NZS2350.8 | N/R | 395 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 Adbri 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 B0a5d2b.

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.

Approved Signatory

M. Wythe

Issue Date: 03/04/2024