

Test Certificate

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Result

>95 %

<5 %

Final

Product Certified:Ground GraTest Certificate Number:190127Despatched From:Cockburn CeSample Code:B06a124Sample Date:6/01/2019

Ground Granulated Blast Furnace Slag 190127 Cockburn Cement, Port Hedland Plant, WA B06a124 6/01/2019

Requirements

Ground Granulated Iron Blast-Furnace Slag

Calcium Sulphate

| Reportable Property | Test Method | Requirements of AS3582.2 | Result |
|---|-------------|-----------------------------|--------------|
| | | | |
| Total Iron (FeO) | AS2350.2 | N/R | 0.4 % |
| Magnesia (MgO) | AS2350.2 | Max 15.0 % | 11.2 % |
| Total Alkali (Na ₂ O Equivalent) | AS2350.2 | N/R | 0.5 % |
| Manganese (MnO) | ASTM C114 | N/R | 0.5 % |
| Sulfate (as SO ₃) content | AS3583.8 | N/R | 0.1 % |
| Sulfide Sulfur (S) | AS3583.7 | Max 1.5 % | 0.7 % |
| Chloride Ion Content | A\$3583.13 | Max 0.1 % | 0.002 % |
| Loss on Ignition | A\$3583.3 | N/R | -0.9 % |
| Insoluble Residue | AS3583.14 | N/R | 0.6 % |
| 45 μm Residue | A\$3583.1 | N/R | 97 % passing |
| Relative Density | A\$3583.5 | N/R | 2.91 |
| Relative Water Requirement | A\$3583.6 | N/R | 97 % |
| Strength Index | AS3583.6 | N/R | 101 % |
| Other Properties | | | |
| SiO ₂ | AS2350.2 | N/R | 31.4 % |
| CaO | AS2350.2 | N/R | 35.8 % |
| Fineness Index | AS2350.8 | N/R | 420 m²/kg |

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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 B06a319.

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:

4/03/2019