

Cement Test Certificate

Final

Product Certified: Type LH Low Heat Cement
Test Certificate Number: 210092
Produced At: Northern Cement, Darwin Plant, NT
Sample Code: B07ff94
Sample Date: 4/02/2021

Nominal Blend	Requirements	Result
Clinker		30%
Ground Granulated Iron Blast-Furnace Slag		65%
Mineral Addition	Max 7.5 %	Nil
Calcium Sulphate		<5 %
Minor Additional Constituents	Max 5 %	Nil

Reportable Property	Test Method	Requirements of AS3972	Result
3 Day Strength	AS2350.11	N/R	14.5 MPa
7 Day Strength	AS2350.11	Min 10.0 MPa	27.4 MPa
28 Day Strength	AS2350.11	Min 30.0 MPa	52.7 MPa
Initial Set Time	AS2350.4	Min 45 min	150 min
Final Set Time	AS2350.4	Max 600 min	240 min
Soundness	AS2350.5	Max 5 mm	0 mm
Sulfuric Anhydride content (SO ₃)	AS3583.8	Max 3.5 %	2.7 %
Chloride Ion	AS3583.13	Max 0.10 %	0.007 %
Peak Temp Rise	AS2350.7	Max 23 °C	22.6 °C

Other Properties			
SiO ₂	AS2350.2	N/R	28.9 %
Al ₂ O ₃	AS2350.2	N/R	10.0 %
Fe ₂ O ₃	AS2350.2	N/R	1.6 %
CaO	AS2350.2	N/R	49.7 %
MgO	AS2350.2	N/R	4.1 %
Na ₂ O Equivalent	AS2350.2	N/R	0.5 %
Loss on Ignition	AS2350.2	N/R	1.2 %
Fineness Index	AS2350.8	N/R	410 m ² /kg
Normal Consistency	AS2350.3	N/R	33.7 %

This document shall not be reproduced except in full.

REMARKS

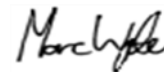
These test result apply specifically to the sample as received at the Adelaide Brighton Cement Birkenhead Laboratory (Accreditation number: 252), 62 Elder Rd Birkenhead SA 5015.

This despatch grab sample complies to the requirements of AS3972:2010, Type LH 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

M. Wythe

Issue Date: 17/03/2021