

Cement Test Certificate

Final

Product Certified: Type GL General Purpose Limestone Cement
Test Certificate Number: 230594
Customer: Morgan Cement, Port Kembla Plant, NSW
Sample Code: B0a04ec
Sample Date: 01/09/2023

Nominal Blend	Requirements	Result
Clinker		>80 %
Ground Granulated Iron Blast-Furnace Slag		Nil
Mineral Addition	Max 20 %	<15 %
Calcium Sulphate		4-8 %
Minor Additional Constituents	Max 5 %	<5 %

Reportable Property	Test Method	Requirements of AS3972	Result
3 Day Strength	AS/NZS2350.11	N/R	37.4 MPa
7 Day Strength	AS/NZS2350.11	Min 20.0 MPa	48.5 MPa
28 Day Strength	AS/NZS2350.11	Min 35.0 MPa	62.7 MPa
Initial Set Time	AS/NZS2350.4	Min 45 min	165 min
Final Set Time	AS/NZS2350.4	Max 600 min	225 min
Soundness	AS/NZS2350.5	Max 5 mm	1 mm
Sulfuric Anhydride content (SO ₃)	AS2350.2	Max 3.5 %	3.0 %
Chloride Ion	BH-TM-0507	Max 0.10 %	0.015 %

Other Properties

SiO ₂	AS2350.2	N/R	18.0 %
Al ₂ O ₃	AS2350.2	N/R	4.8 %
Fe ₂ O ₃	AS2350.2	N/R	2.9 %
CaO	AS2350.2	N/R	61.9 %
MgO	AS2350.2	N/R	1.5 %
Na ₂ O Equivalent	AS2350.2	N/R	0.4 %
Loss on Ignition	AS2350.2	N/R	6.4 %
Fineness Index	AS/NZS2350.8	N/R	380 m ² /kg
Normal Consistency	AS/NZS2350.3	N/R	29.3 %

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REMARKS

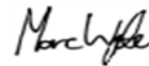
These test result apply specifically to the sample as received at the Adbri Cement Birkenhead Laboratory (Accreditation number: 252), 62 Elder Rd Birkenhead SA 5015.

This despatch grab sample complies to the requirements of AS3972:2010, Type GL Cement.

N/R = No Requirement



Accredited for compliance with ISO/IEC
17025 - Testing.



Approved Signatory

M. Wythe

Issue Date: 27/11/2023