

FINAL REPORT

CERTIFICATE No.: 25018



Boral Cement Limited
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TEST CERTIFICATE OF: Geelong Daily Despatch Environment
PRODUCED AT: Boral Cement Limited Geelong
TESTED AT: Berrima Works Laboratory
SAMPLE IDENTIFICATION: GDDNM2302453
DATE DESPATCHED: 28/06/2023

| PROPERTY | REQUIREMENTS OF AS 3582.2 | RESULT |
|--|---------------------------|------------------------|
| Insoluble Residue (AS 3583.14) | | 0.3 % |
| LOI (AS 3583.3) | | 0.4 % |
| SO ₃ (AS 2350.2; TM 10.01.07) | | 0.0 % |
| MgO (AS 2350.2) | ≤ 15.0 % | 7.0 % |
| Al ₂ O ₃ (AS 2350.2) | ≤ 18.0 % | 14.0 % |
| Fe ₂ O ₃ (AS 2350.2) | | 1.0 % |
| expressed as FeO * | | 0.9 % |
| Mn ₂ O ₃ (AS 2350.2) | | 0.2 % |
| expressed as MnO * | | 0.2 % |
| Total Alkali (AS 2350.2) | | 0.4 % |
| Cl (AS 2350.2) | ≤ 0.1 % | < 0.01 % |
| 45µm Residue (AS 3583.1) | | 1.6 % |
| Fineness Index (AS 2350.8) | | 520 m ² /kg |

REMARKS

Sampling not carried out by laboratory. Samples tested as received.

* NATA accreditation does not cover the performance of this service.



Accredited for compliance with ISO/IEC 17025 - Testing



Marc Smith
Technical Services Manager

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Materials Technical Services**Unit 4, 3-5 Gibbon Road
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boral.com.au**TEST REPORT – MILLED SLAG****CLIENT:** BORAL CEMENT – (TECHNICAL)**FILE NO:** 50/23**ADDRESS:** 39 Delhi Road, North Ryde, NSW 2113**REQUEST NO:** 106769**LAB SAMPLE NO:** 286794**SOURCE OF SAMPLE:** Boral Cement - Geelong**DATE RECEIVED:** 10/07/2023**SAMPLE IDENTIFICATION:** Enviroment ID # GDDNM2302453 - Date sampled: 28/06/2023**IDENTIFICATION OF CEMENT USED:** Boral Cement SL Berrima Ref. 2019**TEST METHOD: AS 3583:** Methods of test for supplementary cementitious materials for use with Portland cement

| PROPERTY | TEST METHOD | RESULT | DATE TESTED |
|--|-------------|--------|-------------|
| Relative density | AS 3583.5 | 2.88 | 11/07/2023 |
| Relative water requirement | AS 3583.6 | 101% | 13/07/2023 |
| Relative strength 7 days (accelerated) | AS 3583.6 | 102% | 20/07/2023 |
| Relative strength 28 days (standard) | AS 3583.6 | 99% | 10/08/2023 |

Marc Smith, Parisa Sowti, Violeta Paicu, Stephanie Koehler, Mat File, File

Note:

- Sample supplied by the client and tested as received.

Approved Signatory

Date

14/8/23

Serial No.

Sam El-Hamawi

CEM106769.SE.1

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Test results in this Test Report relate only to the samples tested.**NATA Accredited Laboratory**
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TEST REPORT

CLIENT: BORAL CEMENT – TECHNICAL
39 Delhi Road, North Ryde, NSW 2113.

FILE No.:50/23

PROJECT: Testing of Enviroment Sample from Boral Cement – Geelong.

REQUEST No.: 106769

TEST PROCEDURE:

AS 3583.12 – 1991 – Determination of Available Alkali

Laboratory Sample No.: 286794
Date Sampled: 28/06/2023
Date Received: 10/07/2023
Date Tested: 15/08/2023
Sample Description: Enviroment ID #
GDDNM2302453
Field No.: 1

TEST RESULTS:

Sodium as Na₂O (%) 0.06
Potassium as K₂O (%) 0.08
Available Alkali (%) 0.1

Available Alkali (%) = Na₂O (%) + (0.658 x K₂O %)

Note:

- Sample was provided by the Client and tested as received.

Parisa Sowti, Violeta Paicu, Marc Smith, Stephanie Koehler, Mat.File, File.



Approved Signatory

Nanthini Selvadurai

Date 15-08-23 Serial No. CHEM106769.NS.1

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TEST REPORT

CLIENT: BORAL CEMENT – TECHNICAL
39 Delhi Road, North Ryde, NSW 2113.

FILE No.:50 / 23

PROJECT: Testing of Enviroment Sample from Boral Cement – Geelong.

REQUEST No.: 106769

TEST PROCEDURE: AS 3583.7 – Determination of Sulfide Sulfur content

Laboratory Sample No.: 286794
Date Sampled: 28/06/2023
Date Received: 10/07/2023
Date Tested: 07/08/2023
Sample Description: Enviroment ID #
GDDNM2302453
Field No.: 1

TEST RESULTS:

Sulfide Sulfur as S (%) 0.19

Sample submitted by the Client.

- Sample was provided by the Client.
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Nanthini S
10th August 2023.

Parisa Sowti, Violeta Paicu, Marc Smith, Stephanie Koehler, Mat.File, File.