### **FINAL REPORT**

CERTIFICATE No.: 24611



Boral Cement Limited N 62 008 528 523 Taylor Avenue New Berrima NSW 2577 Locked Bag 4 New Berrima NSW 2577 T +61 2 4860 2222

TEST CERTIFICATE OF:	Geelong Daily Despatch Enviroment
PRODUCED AT:	Boral Cement Limited Geelong
TESTED AT:	Berrima Works Laboratory
SAMPLE IDENTIFICATION:	GDDNM2300695
DATE DESPATCHED:	23/02/2023

PROPERTY	REQUIREMENTS OF AS 3582.2	RESULT
Insoluble Residue (AS 3583.14)		0.2 %
LOI (AS 3583.3)		0.8 %
SO <sub>3</sub> (AS 2350.2; TM 10.01.07)		0.1 %
MgO (AS 2350.2)	≤ 15.0 %	5.2 %
Al <sub>2</sub> O <sub>3</sub> (AS 2350.2)	≤ 18.0 %	14.5 %
Fe <sub>2</sub> O <sub>3</sub> (AS 2350.2) expressed as FeO *		0.7 % 0.6 %
Mn <sub>2</sub> O <sub>3</sub> (AS 2350.2) expressed as MnO *		0.2 % 0.1 %
Total Alkali (AS 2350.2)		0.4 %
CI (AS 2350.2)	≤ 0.1 %	0.01 %
45µm Residue (AS 3583.1)		1.7 %
Fineness Index (AS 2350.8)		510 m <sup>2</sup> /kg

#### REMARKS

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

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

W

Marc Smith Technical Services Manager

Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accreditation Number: 530 / 531

Date of Issue: 23/03/2023



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#### Boral Construction Materials Materials Technical Services

Unit 4, 3–5 Gibbon Road Baulkham Hills NSW 2153 Australia

PO Box 400, Winston Hills NSW 2153

FILE NO: 50/23

**REQUEST NO:** 104638

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# TEST REPORT - MILLED SLAG

**CLIENT:** BORAL CEMENT – (TECHNICAL)

ADDRESS: 39 Delhi Road, North Ryde, NSW 2113

LAB SAMPLE NO: 280517

SOURCE OF SAMPLE: Boral Cement - Geelong

**DATE RECEIVED:** 06/03/2023

SAMPLE IDENTIFICATION: Environment ID # GDDNM2300695 - Date sampled: 23/02/2023

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	2.85	27/03/2023
Relative water requirement	AS 3583.6	103%	30/03/2023
Relative strength 7 days (accelerated)	AS 3583.6	108%	06/04/2023
Relative strength 28 days (standard)	AS 3583.6	102%	27/04/2023

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

Note:

Sample supplied by the client and tested as received.

liaw Julius Alvaro Approved Signator CEM104638.JA.1 2023 8 04 Serial No. Date



NATA Accredited Laboratory Number: 547

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FILE No.:50/23

REQUEST No.: 104638

## TEST REPORT

- CLIENT: BORAL CEMENT TECHNICAL 39 Delhi Road, North Ryde, NSW 2113.
- PROJECT: Testing of Enviroment Sample from Boral Cement Geelong.

## TEST PROCEDURE:

AS 3583.12 - 1991 - Determination of Available Alkali

Laboratory Sample No.:	280517
Date Sampled:	unknown
Date Received:	06/03/2023
Date Tested:	18/04/2023
Sample Description:	Enviroment ID # GDDNM2300695
Field No.:	1
TEST RESULTS:	

Sodium as Na <sub>2</sub> O (%)	0.05
Potassium as K <sub>2</sub> O (%)	0.10
Available Alkali (%)	0.1

Available Alkali (%) = Na<sub>2</sub>O (%) + (0.658 x K<sub>2</sub>O %)

### 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 19-04-23 Serial No.	CHEM104638.NS.1	

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FILE No.:50 / 23

REQUEST No.: 104638

TEST REPORT

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

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

TEST PROCEDURE: AS 3583.7 - Determination of Sulfide Sulfur content

Laboratory Sample No.: Date Sampled: Date Received: Date Tested: Sample Description:

280517 Unknown 06/03/2023 12/04/2023 Enviroment ID # GDDNM2300695

Field No.:

# TEST RESULTS:

Sulfide Sulfur as S (%)

0.58

Sample submitted by the Client.

- Sample was provided by the Client.
- Test results in this test report relate only to the sample tested.
- This report shall not be reproduced except in full without the approval of the Boral MTS Laboratory.



12<sup>th</sup> April 2023. Parisa Sowti, Violeta Paicu, Marc Smith, Stephanie Koehler, Mat.File, File.