FINAL REPORT

CERTIFICATE No.: 24806



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:	GDDNM2301465	
DATE DESPATCHED:	25/04/2023	

PROPERTY	REQUIREME	ENTS OF AS 3582.2	RESULT
Insoluble Residue (AS 3583.14)			0.5 %
LOI (AS 3583.3)			0.5 %
SO ₃ (AS 2350.2; TM 10.01.07)			0.1 %
MgO (AS 2350.2)	≤ 1	5.0 %	5.1 %
Al ₂ O ₃ (AS 2350.2)	≤ 1	8.0 %	14.2 %
Fe ₂ O ₃ (AS 2350.2) expressed as FeO *			0.9 % 0.8 %
Mn ₂ O ₃ (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)			1.8 %
Fineness Index (AS 2350.8)			450 m ² /kg

REMARKS

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

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

v

Marc Smith Technical Services Manager

Accredited for compliance with ISO/IEC 17025 - Testing

NATA Accreditation Number: 530 / 531

Page 1 of 1



Page 1 of 1 Report Template - Rev. (3) Jul 2021 Authorised by M. A.

Boral Construction Materials Materials Technical Services

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

PO Box 400, Winston Hills NSW 2153

105524

FILE NO: 50/23

REQUEST NO:

T +61 (02) 9624 9900

boral.com.au

TEST REPORT – MILLED SLAG

CLIENT: BORAL CEMENT – (TECHNICAL)

ADDRESS: 39 Delhi Road, North Ryde, NSW 2113

LAB SAMPLE NO: 283103

SOURCE OF SAMPLE: Boral Cement - Geelong

DATE RECEIVED: 03/05/2023

SAMPLE IDENTIFICATION: Environment ID # GDDNM2301465 - Date sampled: 25/04/2023

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 Relative water requirement Relative strength 7 days (accelerated) Relative strength 28 days (standard)	AS 3583.5 AS 3583.6 AS 3583.6 AS 3583.6 AS 3583.6	2.88 104% 92% 88%	03/05/2023 04/05/2023 11/05/2023 01/06/2023

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

Note:

Sample supplied by the client and tested as received.

ucu Julius Alvaro Approved Signatory CEM105524.JA.3 05/06/2023 Serial No. Date



NATA Accredited Laboratory Number: 547

Accredited for compliance with ISO/IEC 17025 – Testing This report shall not be reproduced in full without the approval of the Boral MTS Laboratory. Test results in this Test Report relate only to the samples tested. Page 1 of 1 Report Template – Rev. (3) July 2021 – Authorised by M.A.



Boral Construction Materials Materials Technical Services

Unit 4, 3-5 Gibbon Road Baulkham Hills NSW 2153 Australia PO Box 400, Winston Hills NSW 2153

T: +61 (02) 9624 9900 F: +61 (02) 9624 9999

www.boral.com.au

FILE No.:50/23

REQUEST No.: 105524

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.:	283103
Date Sampled:	25/04/2023
Date Received:	03/05/2023
Date Tested:	09/06/2023
Sample Description:	Enviroment ID # GDDNM2301465
Field No.:	3
TEST RESULTS:	
Sodium as N_{20} (%)	0.05

Sodium as $Na_2 \cup (\%)$	0.05
Potassium as K ₂ O (%)	0.10
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,

TECHNICAL COMPETENCE

Approved Signatory	Nanthini Selvadurai
Date _ <u>09 ~ 06 - 23</u> Seria	I NoCHEM105524.NS.3

NATA Accredited Laboratory

Accredited for compliance with ISO/IEC 17025 - Testing This report shall not be reproduced except in full without the approval of the Boral MTS Laboratory Test results in this Test Report relate only to the samples tested Build something great ™

Page 1 of 1 Report Template – Rev. (3) July 2021 – Authorised by M.A.



Boral Construction Materials Materials Technical Services

Unit 4, 3-5 Gibbon Road Baulkham Hills NSW 2153 Australia PO Box 400, Winston Hills NSW 2153

T: +61 (02) 9624 9900 F: +61 (02) 9624 9999 www.boral.com.au

TEST REPORT

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

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

-

REQUEST No.: 105524

FILE No.:50 / 23

TEST PROCEDURE: AS 3583.7 - Determination of Sulfide Sulfur content

Laboratory Sample No.:	283103
Date Sampled:	25/04/2023
Date Received:	03/05/2023
Date Tested:	26/05/2023
Sample Description:	Enviroment ID # GDDNM2301465
Field No.:	3

TEST RESULTS:

Sulfide Sulfur as S (%) 0.26

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.



Nanthini S 31st May 2023. Parisa Sowti, Violeta Paicu, Marc Smith, Stephanie Koehler, Mat.File, File.