

# Certificate Of Analysis

Certificate Number: **0006-21** Issue Number: **1** Issue Date: **9/04/2021 1:03:43 PM**  
 Test Certificate for: **Fine Grade Ash - Grade 1**  
 Produced at: **Sunstate Cement Ltd., Port of Brisbane, Australia**  
 Monthly Composite for: **December, 2020**  
 Material Source: **MILLMERRAN**  
 Point of Sampling: **Final product air slide, Sunstate Cement Ltd., Port of Brisbane, Australia**  
 Sample Tested at: **Sunstate Cement Ltd., Port of Brisbane, Australia**  
 Sample Identification: **U6M-000167**

SPECIFIC PROPERTY	TEST METHOD	AS3582.1 REQUIREMENTS		RESULT
Fineness	AS3583.1	Minimum	75 %	81.4 %
Loss on ignition	AS3583.3	Maximum	4 %	0.6 %
Moisture content	AS3583.2	Maximum	0.5 %	0.2 %
SO <sub>3</sub>	InHouse	Maximum	3 %	0.5 %
Total Alkali	AS2350.2			0.8 %
Avalible Alkali	AS3583.12			0.2 %
Chloride	AS3583.13	Maximum	0.1 %	0.004 %
SiO <sub>2</sub> + Al <sub>2</sub> O <sub>3</sub> + Fe <sub>2</sub> O <sub>3</sub>	AS3583.13	Minimum	70 %	90.2 %
Relative Density	AS3583.5			2.2 g/cm <sup>3</sup>
Relitave Water	AS3583.6			99.2 %
Relitave Strength	AS3583.6	Minimum	75 %	101.7 %

**Sampling Procedure:**

Samples obtained were in accordance with AS2350.1

**Remarks:**

- 1 These results only relate to the specimens identified on this report
- 2 Available alkali determined by: Cement Australia Technical Services Accreditation No 187 & 188



NATA accredited  
 Laboratory Number: 2191

Accredited for compliance with  
 ISO/IEC 17025 Testing



George Santagiuliana  
 Approved Signature

09/04/2021

***This certificate replaces previous certificate number 0006-21, issue 0 dated (REASON: Test Data Updated)***