## STANDARD FLY ASH CERTIFICATE



FINAL
Prior Reports: None

Certificate Number: CERT232961

Issued: 15 September 2023

Flyash Australia Pty Ltd ABN 68 002 840 271 P.O. Box 190 Eastwood NSW 2122 Email: contact@flyash.com.au www.flyashaustralia.com.au

Product being certified: Mt Piper Monthly Grab Fly Ash

Product sample date: 05-Sep-2023

Sample Identification: Sample Code: 23090101
Source Power Station: Mount Piper Power Station

Sample Condition: Tested as Received. Testing Commenced on 05-Sep-2023

Certifying Laboratory: Cement Australia - Darra Laboratory,

18 Station Avenue, Darra Queensland 4076 Australia.

## **Test Results**

Test	Moisture	Fineness @ 45 micron	Loss on Ignition	Sulfuric Anhydride	Available Alkali	Chloride Ion	Chemical Composition
	%	% Passed	%	%	%	%	%
Result	< 0.1	86	0.8	< 0.1	n/a	< 0.002	95.2
Test Method	AS3583.2	AS3583.1	AS3583.3	AS2350.2	AS3583.12	AS3583.13	AS2350.2
AS 3582.1	0.5 % Maximum	75% Minimum	4.0 % Maximum	3.0 % Maximum	-	0.1 % Maximum	70% Minimum

Test	Relative Density	Relative Water Requirement	Strength Index 7 Day Acc.	Reference Cement Details	
		%	%	Identification:: 23090159	
Result	2.12	93	97	Source: Goliath GP	
Test Method	AS3583.5	AS3583.6	AS3583.6	Product Type: Type GP	
AS 3582.1	-	-	75% Minimum	Sample Date: 06-Sep-23	

**Additional Testing - Oxides** 

Test	CaO by XRF %	SiO <sub>2</sub> by XRF %	Al <sub>2</sub> O <sub>3</sub> by XRF %	Fe <sub>2</sub> O <sub>3</sub> by XRF %	SO <sub>3</sub> by XRF	MgO by XRF %	Na₂O by XRF %
Result	0.3	69.6	23.0	2.6	< 0.1	0.2	0.37
Test Method	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2

Test	K₂O by XRF	SrO by XRF	TiO2 by XRF	P <sub>2</sub> O <sub>5</sub> by XRF	Mn <sub>2</sub> O <sub>3</sub> by XRF	Total Alkali (NaEQ)
	%	%	%	%	%	%
Result	2.19	<0.1	0.8	0.2	< 0.1	1.81
Test Method	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2	AS2350.2

This sample grade conforms to the following requirements of AS 3582.1:2016

Special	Grade 1	Grade 2
	Х	

**Approved Signatory** 

A Prem Signatory - Cement Australia

**Chemical Testing** 

Construction Materials Testing

Accredited for compliance with ISO/IEC 17025 - Testing NATA is a signatory to the ILAC Mutual Recognition Arrangement for the mutual recognition of the equivalence of testing, medical testing, calibration, inspection, proficiency testing scheme providers and reference materials producers reports and certificates.

Laboratory accreditation number: 188 Laboratory accreditation number: 187



Notes:

