

TEST REPORT

Report No.: P3h/1110
Page: 1 of 1
Date of issued: 10 Nov 11
Client: Green Island Cement Company Limited - Sales Department
Date sample received: 02 Oct 11
Date test commenced: 06 Oct 11
Date test completed: 04 Nov 11

Sample Description:


Brand Name: Pulverized Fuel Ash from Green Island Cement Company Limited (Country of Origin: Hong Kong)
Client's sample identification: PFA dispatch during week ending 01 Oct 11
Our Lab. No.: 68043

Test Result:

<u>Test</u>	<u>Test Methods</u>	<u>Result</u>	<u>Requirement of BS 3892 : Part 1 : 1997</u>
Fineness	BS 3892 : Part 1 : 1997 Annex D	6.1 %	not more than 12.0%
Density	BS 3892 : Part 1 : 1997 Clause 7	Trial 1: 2547 kg/m ³ Trial 2: 2545 kg/m ³ Average: 2550 kg/m ³	not less than 2000 kg/m ³
Initial Setting Time	BS 3892 : Part 1 : 1997 Clause 10	225 mins	not less than Portland cement
Initial Setting Time *	BS EN 196-3 : 1995 Clause 6	140 mins	
Soundness	BS 3892 : Part 1 : 1997 Clause 11	0.5 mm	not more than 10 mm
Soundness *	BS EN 196-3 : 1995 Cl. 7	1.0 mm	
Strength Factor	BS 3892 : Part 1 : 1997 Annex F	0.80	not less than 0.8 #
Compressive strength at 28 days *	BS EN 196-1 : 1995	60.7 N/mm ²	
Water Requirement	BS 3892 : Part 1 : 1997 Annex E	93 %	not greater than 95% #
Sulphuric Anhydride as SO ₃	BS EN 196 : Part 2 : 1995 Clause 8	0.78 %	not more than 2.0% (m/m)
Loss on Ignition	BS EN 196 : Part 2 : 1995 Clause 7 (using 1h ignition time)	2.29 %	not more than 7% (m/m)
Moisture Content	BS 3892 : Part 1 : 1997 Annex C	0.1 %	not more than 0.5%
Chloride	BS EN 196 : Part 21 : 1992 Clause 4	<0.01 %	not more than 0.10% (m/m)
Calcium Oxide**	BS EN 196 : Part 2 : 1995 Clause 13.14	10.07 %	not more than 10.0% (m/m)
Na ₂ O	In-house method LAB-T-065	1.00 %	not required
K ₂ O	In-house method LAB-T-065	1.42 %	not required

Remark: 1. Results relate only to the item tested.
2. Sampling is performed by laboratory technician and sampling procedure is not accredited by HKAS.
3. * means the results are for Portland cement alone with Lab. no. 64821.
4. Loss on ignition showing in this report is the observed loss on ignition.

Interpretation: 1. # means the requirement for strength factor and water requirement are not required by the "General Specification for Civil Engineering Works" 2006 Edition Volume 2 clause 16.07.
2. ** according to CEDD "General Specification for Civil Engineering Works" 2006 Edition Volume 2 clause 16.07, PFA with CaO content over 10% but not over 20% and with soundness value not more than 10mm is acceptable as "high-lime PFA".

Certified by: 
Approved Signatory: Ng Lap Man Franco
Laboratory Superintendent