

Schedule

Admaterials Technologies Pte Ltd
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Certificate No. : LA-2010-0461-A

Issue No. : 13

Date : 24 Jan 2020

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FIELD OF TESTING : Chemical and Biological Testing

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT
A Aggregates	1. Chloride Content	SS 73: Part 17: 1992 BS 812: Part 117: 1988 BS EN 1744-1: 2009 + A1: 2012 (Clause 7) BS EN 1744-1: 1998 (Clause 7) BS EN 1744-5: 2006
	2. Sulfate Content	SS 73: Part 18: 1992 BS 812: Part 118: 1988 BS EN 1744-1: 2009 + A1: 2012 (Clause 10, 12) BS EN 1744-1: 1998 (Clause 10, 12)
	3. Potential Alkali Silica Reactivity (Chemical Method)	ASTM C289: 2007
	4. Lightweight Organic Contaminator	BS EN 1744-1: 2009 + A1: 2012 (Clause 14.2)
	5. Humus Content	BS EN 1744-1: 2009 + A1: 2012 (Clause 15.1)
	6. Fulvo Acid	BS EN 1744-1: 2009 + A1: 2012 (Clause 15.2)
	7. Loss on Ignition	BS EN 1744-1: 2009 + A1: 2012 (Clause 17)
	8. Fixed Water Content by Ignition Test	ASTM C637-14, Clause 9.1.3.1
	9. Total Sulfur Content	BS EN 1744-1:2009+A1:2012, Clause 11
	10. Water Soluble Chloride Salts using the Mohr Method	BS EN 1744-1:2009+A1:2012, Clause 9

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B1 Cement, Silica Fume, Ground Granulated Blast Furnace Slag	<ol style="list-style-type: none"> 1. Loss of Ignition 2. Sulfate 3. Residual Insoluble 4. Manganese 5. Silica 6. Iron (III) Oxide 7. Aluminium Oxide 8. Calcium Oxide 9. Magnesium Oxide 10. Chloride 11. Alkali 12. Carbon Dioxide 13. Sulfide 14. Pozzolanicity 15. Heat of Hydration – Solution Method 16. Chemical Analysis by X-Ray Fluorescence 17. Chemical Analysis of Hydraulic Cement for Specific Analytes <ol style="list-style-type: none"> a. Insoluble Residue b. Ferric Oxide c. Phosphorus Pentoxide d. Titanium Dioxide e. Ammonium Hydroxide Group f. Magnesium Oxide g. Sulfur Trioxide h. Loss On Ignition i. Silicon Dioxide j. Aluminium Oxide k. Calcium Oxide l. Sodium & Potassium Oxide, Total Alkali m. Chloride 18. Free Calcium Oxide in Cement - Rapid (Sr(NO₃)₂) Method 	<p>BS EN 196-2: 2013 SS 397: Part 2: 1997</p> <p>BS EN 196-2: 2013 SS 397: Part 2: 1997</p> <p>BS EN 196-5: 2011</p> <p>BS EN 196-8: 2010</p> <p>BS EN 196-2: 2013</p> <p>ASTM C114-18</p> <p>ASTM C114-18, No. 30.3</p>
B2 Cement, Fly Ash	<ol style="list-style-type: none"> 1. Reactive Silica 	<p>BS EN 196-2: 2013 / (SS EN 197-1: 2014) (BS EN 450-1:2012)</p>

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B3 Silica Fume	<ol style="list-style-type: none"> Specific Surface Area – BET method Free Calcium Oxide Surface silicon 	<p>ISO 9277: 2010</p> <p>BS EN 451-1:2017</p> <p>ISO 9286 : 1997</p>
B4 Fly Ash	<ol style="list-style-type: none"> Loss of Ignition Sulfate Residual Insoluble Manganese Silica Iron (III) Oxide Aluminium Oxide Calcium Oxide Magnesium Oxide Chloride Alkali Free Calcium Oxide 	<p>BS EN 196-2: 2013 (BS EN 450-1: 2012)</p> <p>BS EN 451-1:2017</p>
C Concrete (Hardened Concrete)	<ol style="list-style-type: none"> Chloride Sulfate Cement Content Silane Content by Py-GC Apparent Chloride Diffusion Coefficient of Cementitious Mixtures by Bulk Diffusion Imidachloprid Concentration 	<p>BS 1881-124:2015</p> <p>BS EN 14629:2007</p> <p>BS 1881-124:2015</p> <p>BS 1881-124:2015</p> <p>ADM/CB/0005:2016</p> <p>ASTM C1556 - 11a(2016) Nordtest Method NT BUILD 443 (Approved 1995-11)</p> <p>ADM/CB/0006:2018</p>
D Plaster / Motar / Screed	<ol style="list-style-type: none"> Mix Composition (i.e. Cement, Lime, Gypsum & Aggregate) Chloride Sulfate 	<p>BS 4551 : 2005 + A2:2013</p>
E Admixture	<ol style="list-style-type: none"> Absolute Density at 20°C Conventional Dry Material Content pH Value at 20°C Water Soluble Chloride Alkali Content 	<p>ISO 758: 1976</p> <p>BS EN 480-8: 2012</p> <p>ISO 4316: 1977</p> <p>BS EN 480-10: 2009</p> <p>BS EN 480-12: 2005</p>

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E Admixture	6. Silicon Dioxide SiO ₂ Content 7. Infrared Analysis 8. Ash Content 9. Homogeneity 10. Colour	BS EN 196-2: 2013 (procedure 4.5) BS EN 480-6: 2005 SS 320: 1987 BS EN 934-1:2008 BS EN 934-1:2008
F Repair Material		
1 Polymer Modified Cement Mortar / Waterproofing Coating / Modified Cement Mortar / Waterproofing Coating	1. Polymer Content 2. Polymer Identification 3. Cement Content	ADM/C&B/001: 2013 ADM/C&B/002: 2010 BS 4551: 2005 + A2: 2013
2 Cementitious Waterproof Membrane	1. Verification of base polymer 2. Chloride Content	ADM/C&B/001: 2013 ADM/C&B/002: 2010 ADM/C&B/003: 2010
3 Waterproofing Coating - for repair to external wall	1. Verification of base polymer 2. Polymer Content	ADM/C&B/002: 2010 ADM/C&B/001: 2013
4 Non-Cementitious Waterproof Membrane	1. Volatile Content 2. Verification of base polymer	ADM/C&B/001: 2013 ADM/C&B/001: 2013 ADM/C&B/002: 2010
G Building Material		
1 Prepacked Mortar	1.) Polymer Content) ADM/C&B/001: 2013
2 Prepacked Skim Coat	2.) Product Identification Analysis) ADM/C&B/002: 2010
3 Prepacked Waterproof Screed	1. Product Identification Analysis) ADM/C&B/002: 2010
4 Tile Grout	1. Polymer Content) ADM/C&B/001: 2013
5 Acrylic Polymer Cementitious Coating	1. Identification of Polymer	ADM/C&B/002: 2010
H Paint and Coating		
	1. Density	SS 5: Part B7: 2013
	2. Non Volatile Matter	SS 5: Part B2: 2013 ISO 3251: 2008(E)
	3. Paint Dilution Test	ADM/C&B/004:2014
	4. Volatile Organic Compounds	ISO 11890-2: 2013 ISO 11890-1: 2007
	5. Water Content by Karl Fisher	ADM/C&B/009: 2019

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H Paint and Coating	6. N-methyl Pyrrolinone (NMP) 7. Epichlorohydrin 8. Phthalates -bis(2-n-butoxyethyl)phthalate -Benzyl butyl phthalate -Dipentyl phthalate -Dibutyl phthalate -Dicyclohexyl phthalate -Diethyl phthalate -Dihexyl phthalate -Diisobutyl phthalate -Dimethyl phthalate -Dinonyl phthalate -Di-n-octyl phthalate -bis(2-Ethoxyethyl)phthalate -bis(2-Ethylhexyl)phthalate -bis(2-Methoxyethyl)phthalate -bis(4-Methyl-2-pentyl)phthalate -Diisodecyl phthalate -Diisononyl phthalate	ADM/C&B/008:2019 ADM/C&B/008:2019 CPSC-CH-C10001-09.4
I Metals and Metal Products	Determination of Metal Composition by Optical Emission Spectroscopy 1. Carbon and Low Alloy Steels 2. Stainless Steels	ASTM E415 - 17 ASTM A751: 2014a ASTM E1086: 2014 ASTM A751: 2014a
J Food, Chinese Proprietary Medicine (CPM), Traditional Chinese Medicine (TCM), Health Supplements	1. Arsenic, Cadmium, Copper, Lead, Mercury	ADM/C&B/007:2018

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K Building Products, Plastic, Rubber, Polymer materials, Packing materials	1 Phthalates: -bis(2-n-butoxyethyl)phthalate -Benzyl butyl phthalate -Dipentyl phthalate -Dibutyl phthalate -Dicyclohexyl phthalate -Diethyl phthalate -Dihexyl phthalate -Diisobutyl phthalate -Dimethyl phthalate -Dinonyl phthalate -Di-n-octyl phthalate -bis(2-Ethoxyethyl)phthalate -bis(2-Ethylhexyl)phthalate -bis(2-Methoxyethyl)phthalate -bis(4-Methyl-2-pentyl)phthalate -Diisodecyl phthalate -Diisononyl phthalate	CPSC-CH-C10001-09.4

Approved Signatory

Mr Lu Jin Ping – For All Accredited Tests

Mr Julifin
Ms Sherly Wijaya } For Sections A – I, K

Ms May Soe Moe – For Sections A – I

Ms Tay Chiou Yann – For Section H (24-26), J,K

Note:

This laboratory is accredited in accordance with the recognised International Standard ISO/IEC 17025. A laboratory's fulfilment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and **management system requirements** that are necessary for it to consistently deliver technically valid test results. The **management system requirements** in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001.