SINGAPORE LABORATORY ACCREDITATION SCHEME

Accredited Laboratory SAC-SINGLAS

Schedule

Admaterials Technologies Pte Ltd
58 Sungei Kadut Loop
Singapore 729501

Certificate No. : LA-2010-0461-A

Issue No. : 16

Date : 26 August 2022

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 C637-20, 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

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT
	11. Organic Impurities	ASTM C40 / C40M-20 SS 73: 1974
B1 Cement, Silica Fume, Ground Granulated Blast Furnace Slag	1. Loss of Ignition 2. Sulfate 3. Residual Insoluble 4. Manganese 5. Silica	BS EN 196-2: 2013 SS 397: Part 2: 1997
	6. Iron (III) Oxide 7. Alumunium Oxide 8. Calcium Oxide 9. Magnesium Oxide 10. Chloride 11. Alkali 12. Carbon Dioxide 13. Sulfide	BS EN 196-2: 2013 SS 397: Part 2: 1997
	14. Pozzolanicity	BS EN 196-5: 2011
	15. Heat of Hydration – Solution Method	BS EN 196-8: 2010
	16. Chemical Analysis by X-Ray Fluorescence	BS EN 196-2: 2013
	17. Chemical Analysis of Hydraulic Cement for Specific Analytes • Insoluble Residue • Ferric Oxide • Phosphorus Pentoxide • Titanium Dioxide • Ammonium Hydroxide Group • Magnesium Oxide • Sulfur Trioxide • Loss On Ignition • Silicon Dioxide • Aluminium Oxide • Calcium Oxide • Sodium & Potassium Oxide, Total Alkali • Chloride	ASTM C114-18
	18. Free Calcium Oxide in Cement - Rapid ($Sr(NO_3)_2$) Method	ASTM C114-18, No. 30.3

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B2 Cement, Fly Ash	1. Reactive Silica	BS EN 196-2: 2013 / (SS EN 197-1: 2014) (BS EN 450-1: 2012)
B3 Silica Fume	1. Specific Surface Area – BET method	ISO 9277: 2010
	2. Free Calcium Oxide	BS EN 451-1: 2017
	3. Surface Silicon	ISO 9286: 2021
	4. Loss on Ignition	ASTM C311/C311M-22
B4 Fly Ash	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	BS EN 196-2: 2013 (BS EN 450-1: 2012)
	12. Free Calcium Oxide	BS EN 451-1: 2017
	13. Reactive Calcium Oxide	BS EN 197-1: 2011
	14. Soluble Phosphate (P_2O_5)	BS EN 450-1: 2012 (Annex C)
	15. Loss on Ignition	ASTM C311/C311M-22
C Concrete (Hardened Concrete)	1. Chloride	BS 1881-124: 2015 + A1: 2021 BS EN 14629: 2007
	2. Sulfate	BS 1881-124: 2015 + A1: 2021
	3. Cement Content	BS 1881-124: 2015 + A1: 2021
	4. Silane Content by Py-GC	ADM/CB/0005: 2016
	5. Apparent Chloride Diffusion Coefficient of Cementitious Mixtures by Bulk Diffusion	ASTM C1556-11a (2016) Nordtest Method NT BUILD 443 (Approved 1995-11)

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	6. Imidachloprid Concentration	ADM/CB/0006: 2018
	7. Determination of the chloride resistance of concrete, unidirectional diffusion	EN 12390-11: 2015
	8. Determining the Penetration of Chloride Ion into Concrete by Ponding	ASTM C1543-02
D Plaster / Motar / Screed	1. Mix Composition (i.e. Cement, Lime, Gypsum & Aggregate) 2. Chloride 3. Sulfate	BS 4551: 2005 + A2: 2013
E Admixture	1. Absolute Density at 20°C	ISO 758: 1976
	2. Conventional Dry Material Content	BS EN 480-8: 2012
	3. pH Value at 20°C	ISO 4316: 1977
	4. Water Soluble Chloride	BS EN 480-10: 2009
	5. Alkali Content	BS EN 480-12: 2005
	6. Silicon Dioxide SiO_2 Content	BS EN 196-2: 2013 (procedure 4.5)
	7. Infrared Analysis	BS EN 480-6: 2005
	8. Ash Content	SS 320: 1987
	9. Homogeneity	BS EN 934-1:2008
	10. Colour	BS EN 934-1:2008
	11. Determination of Total Chlorine Content	EN ISO 1158:1998

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F	**Repair Material**		
1	Polymer Modified Cement Mortar / Waterproofing Coating / Modified Cement Mortar / Waterproofing Coating	1. Polymer Content	ADM/C&B/001: 2021
		2. Polymer Identification	ADM/C&B/002: 2021
		3. Cement Content	BS 4551: 2005 + A2: 2013
2	Cementitious Waterproof Membrane	1. Verification of base polymer	ADM/C&B/001: 2021 ADM/C&B/002: 2021
		2. Chloride Content	ADM/C&B/003: 2010
3	Waterproofing Coating - for repair to external wall	1. Verification of base polymer	ADM/C&B/002: 2021
		2. Polymer Content	ADM/C&B/001: 2021
4	Non-Cementitious Waterproof Membrane	1. Volatile Content	ADM/C&B/001: 2021
		2. Verification of base polymer	ADM/C&B/001: 2021 ADM/C&B/002: 2021
G	**Building Material**		
1	Prepacked Mortar	1. Polymer Content	ADM/C&B/001: 2021
2	Prepacked Skim Coat	1. Product Identification Analysis	ADM/C&B/002: 2021
3	Prepacked Waterproof Screed	1. Product Identification Analysis	ADM/C&B/002: 2021
4	Tile Grout	1. Polymer Content	ADM/C&B/001: 2021
5	Acrylic Polymer Cementitious Coating	1. Identification of Polymer	ADM/C&B/002: 2021
H	**Paint and Coating**	1. Density	SS 5: Part B7: 2013(2018)+A1:2018 ASTM D1475-13 (2020)
		2. Non-Volatile Matter	SS 5: Part B2: 2013 (2018), ISO 3251: 2019, IDT ASTM D2369-20
		3. Paint Dilution Test	ADM/C&B/004: 2020

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	4. Volatile Organic Compounds	ISO 11890-2: 2013 ISO 11890-1: 2007
	5. Water Content by Karl Fisher	ADM/C&B/009: 2019
	6. Determination of Low Concentrations of Mercury in Paint by Atomic Absorption Spectroscopy	SS 5: Part C4: 1988
	7. Determination of Low Concentrations of Lead, Cadmium and Cobalt in Paint by Atomic Absorption Spectroscopy	SS 5: Part C6: 1988
	8. Determination of Hexavalent Chromium (Cr(VI)) in Polymers and Electronics by the Colorimetric Method	IEC 62321-7-2: 2017
I Metals and Metal Products	<u>Determination of Metal Composition by Optical Emission Spectroscopy</u>	
	1. Carbon and Low Alloy Steels	ASTM E415-21 ASTM A751-21
	2. Stainless Steels	ASTM E1086-14 ASTM A751-21
J Food, Chinese Proprietary Medicine (CPM), Traditional Chinese Medicine (TCM), Health Supplements	1. Arsenic, Cadmium, Copper, Lead, Mercury	ADM/C&B/007: 2021

MATERIALS / PRODUCTS TESTED	TESTS / PROPERTIES	STANDARD METHODS / TECHNIQUES / EQUIPMENT
K Building Products, Plastic, Rubber, Polymer materials, Packing materials, Paint and Coating	1. Pthalates: • 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
	2. N-methyl Pyrrolinone (NMP)	ADM/C&B/008:2019
	3. Epichlorohydrin	ADM/C&B/008:2019

Approved Signatories

S/N	Name		Scope
1.	Ms Sherly Wijaya	–	For all accredited tests in Sections A to I, K except the following: • Section B3: Test 4. • Section B4: Test 13, 14, 15. • Section C: Test 8. • Section E: Test 11. • Section H: Test 6, 7, 8.
2.	Ms May Soe Moe	–	For all accredited tests in Sections A to I.
3.	Ms Doris Tan	–	For all accredited tests in Sections J and 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.