

TEST REPORT

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SETSCO

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Our Ref: CE-8500132805/CHS/1

Date : 03/12/2020

Tested For

Greenlam Asia Pacific Pte Ltd

11 Sungei Kadut Crescent

Singapore 728683 Attn: Banita Mishra

Date Sample Received:

11/11/2020

Date Commenced

12/11/2020

Date Completed

02/12/2020

Sample Description

Sample was received on 11/11/2020 with reference:

High Pressure Laminates

Test Requested

To determine the content of the following heavy metals in the sample submitted in compliance to SGBP requirement under Clause A5:

Metals:

- 1. Cadmium (Cd)
- 2. Lead (Pb)
- 3. Mercury (Hg)
- 4. Hexavalent Chromium (Cr⁶⁺)

AUTHORIZED BY:

CHIN HUYSENG SENIOR MANAGER

BIOLOGICAL & CHEMICAL TECHNOLOGY DIVISION

SETSCO SERVICES PTE LTD

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Test Results :

Item No.	Element	Result (ppm / mg/kg)	SGBP Requirement (ppm / mg/kg)
1	Cadmium (Cd), ppm wt	Not Detected	100
2	Lead (Pb), ppm wt	Not Detected	1000
3	Mercury (Hg), ppm wt	Not Detected	1000
4	Hexavalent Chromium (Cr ⁶⁺), ppm wt	Not Detected	1000

Notes: 1) ppm wt : mg/kg

2) Detection Limit : a) Cadmium : 2.0 ppm

b) Lead : 10.0 ppm c) Mercury : 2.0 ppm d) Hexavalent Chromium : 2.0 ppm

Test Method:

Hexavalent Chromium : IEC 62321 : 2008

Mercury : IEC 62321-4 Ed 1.0 : 2013

Cadmium, Lead : IEC 62321-5 Ed 1.0 : 2013

CH



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RoHS Substances Analysis Flowchart - Acid Digestion

Elements: Cadmium (Cd), Lead (Pb), Mercury (Hg)

Pretreatment:

Quantity of Test Material
(Approximately 0.2g for polymer and component samples, 0.1g for metal samples)

Decomposition Method and /or Dissolution Method
(With reference to IEC 62321-4 Ed.1.0: 2013 & IEC 62321-5 Ed.1.0: 2013)

Solution Quantity for Analysis (Top up volume 50ml for polymer and component samples, 25ml for metal samples)

Analysis Method (With reference to IEC 62321-4 Ed.1.0 : 2013 & IEC 62321-5 Ed.1.0 : 2013)

Instrument Used:

- 1. ICP-OES: Perkin Elmer ICP Optima 5300DV
- 2. Microwave: Milestone Ethos Touch Control

Standard Used:

Merck: Cadmium, Chromium, Lead and Mercury standard solution.





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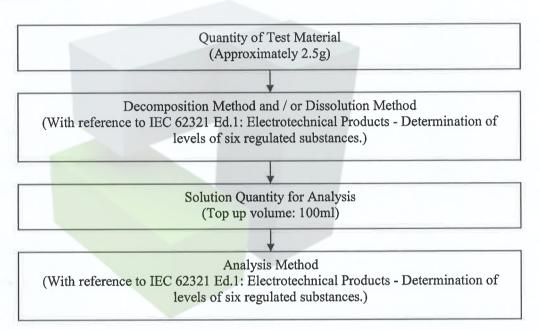
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RoHS Substances Analysis Flowchart - Alkaline Digestion

Element: Hexavalent Chromium (Cr⁶⁺)

Pretreatment:



Instrument Used:

UV/Vis Spectrometer: Shimadzu UV-Vis Spectrometer, UV-1601/A1075.

Standard Used:

HACH-Chromium Reference Standard Solution.

