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Client: Hwa Lin Stainless Steel Industry Co., Ltd.

61/271-272 Rama 9 Road, Huaykwang, Huaykwang Bangkok 10310 Thailand

The following sample(s) was/were submitted and identified by/on behalf of the client as:

Sample Description : STAINLESS STEEL (SUS 304)

Sample No. 3231255

Sample Condition : Sample is contained in a plastic bag.

Quantity Submitted : 1 pack

Sample Receiving Date : 24-Dec-2015

: 28-Dec-2015 to 04-Jan-2016 **Testing Period** 

: In accordance with the RoHS Directive 2011/65/EU Annex II [amended by Directive Test Requested

(EU) 2015/863]

**Test Method** : (1) IEC 62321-5 edition 1.0 :2013 by ICP-OES for Lead content.

(2) IEC 62321-5 edition 1.0 :2013 by ICP-OES for Cadmium content

(3) IEC 62321-4 edition 1.0 :2013 by ICP-OES (microwave digestion) for Mercury

content

(4) IEC 62321:2008 Annex B for Hexavalent Chromium Analyzed by UV-Vis

spectrometry.

**Test Results** : Please refer to next page.

Signed for and on behalf of SGS (Thailand) Limited

**Patcharee Treeporncharoen Laboratory manager - Chemical** 





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Test results by chemical method (Unit: mg/kg)

Test Item (s):	Method (Refer to)	Result (1)	MDL	RoHS Limit
Lead (Pb)	(1)	n.d.	2	1000
Cadmium (Cd)	(2)	n.d.	2	100
Mercury (Hg)	(3)	n.d.	2	1000
Hexavalent Chromium (CrVI) by Spot test / boiling water extraction (optional) #	(4)	Negative	-	-

**Test Part Description** Result (1) metal

## Note:

(a) mg/kg = ppm; 0.1wt% = 1000 ppm

- (b) n.d. = Not Detected
- (c) MDL = Method Detection Limit
- (d) Spot-test:

Negative - Absence of CrVI coating, Positive = Presence of CrVI coating;

(The tested sample should be further verified by boiling-water-extraction method if the spot test result cannot be confirmed.)

Boiling-water-extraction:

Negative = Absence of CrVI coating

Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm2 sample area.

(e) # = Positive indicates the presence of Hexavalent Chromium on the areas and result be regarded as conflict with RoHS requirement.

Negative indicates the absence of CrVI on the tested areas and result be regarded as no conflict with RoHS requirement.

- (f) "-" = Not regulated
- (g) For corrosion protection coatings on metals: Information on storage conditions and production date of the tested sample is unavailable and thus results of Cr(VI) represent status of the sample at the time of testing.

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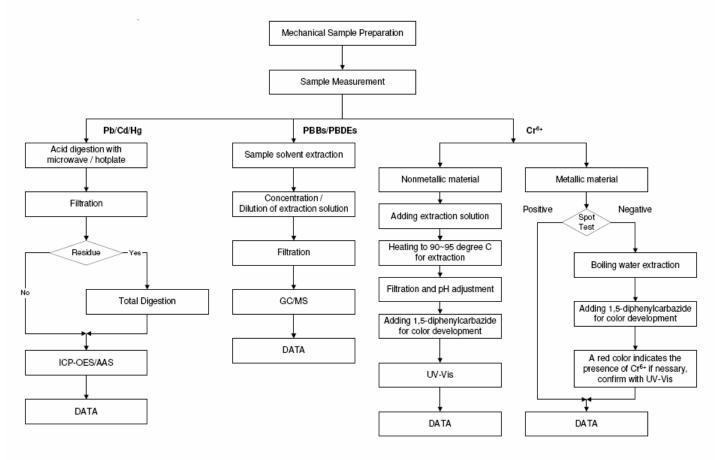
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## Flow Chart for IEC 62321: Pb/Cd/Hg/Cr6+/PBBs/PBDEs Testing

- 1. Operator : Siam Polarwut
- 2. Section Chief: Patcharee Treeporncharoen
- 3. The sample was dissolved totally by pre-conditioning method according to below flowchart. (Cr6+ and PBBs/PBDEs test method excluded)



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## SAMPLE/ATTACHMENT PICTURE

