

No. CTSSA/03211/12

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CTS Ref. CTSSA/12/0515/CSC

CSC STEEL SDN BHD 180, KAWASAN INDUSTRI AYER KEROH, AYER KEROH 75450 MELAKA, MALAYSIA

The following merchandise was (were) submitted and identified by the client as:

Sample Description : GI SGCC Z12, BMT 1.0mm (HP5611)

Sample Receiving Date : 16/02/2012

Testing Period : 16/02/2012 to 22/02/2012

Test Requested : Selected test(s) as requested by client

Test Method : Please refer to next page(s).

Test Results : Please refer to next page(s).

Analysts : Teh Pui Sean & Tay Siam Pine

SGS LABORATORY SERVICES (M) SDN. BHD.

CHÓNG KIEN LEN B.Sc.(HONS) AMIC SENIOR LAB MANAGER



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Test results:

Test Part Description:

Sample Description : GI SGCC Z12, BMT 1.0mm (HP5611)

RoHS Directive 2011/65/EU Annex II

Test Item(s):	Unit	Test Method	Results	MDL
Cadmium(Cd)	mg/kg	With reference to EPA Method 3050B, and performed by ICP-OES	N.D.	2
Lead (Pb)	mg/kg	With reference to EPA Method 3050B, and performed by ICP-OES	N.D.	2
Mercury (Hg)	mg/kg	With reference to EPA Method 3052, and performed by ICP-OES	N.D.	2
Hexavalent Chromium (CrVI)	mg/kg	With reference to JIS H 8625, and performed by UV-VIS Spectrophotometry	424	2
Sum of PBBs	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	-
Monobromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Dibromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Tribromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Tetrabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Hexabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Pentabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Heptabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Octabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Nonabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Decabromobiphenyl	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5

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Sum of PBDEs	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	-
Monobromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Dibromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Tribromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Tetrabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Pentabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Hexabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Heptabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Octabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Nonabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5
Decabromodiphenyl ether	mg/kg	With reference to EPA Method 3540C/3550C, and performed by GC-MS	N.D.	5

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

(b) N.D. = Not Detected

(c) MDL = Method Detection Limit

(d) - = Not regulated

(e) Result Cr6+ based on plating weight given by client

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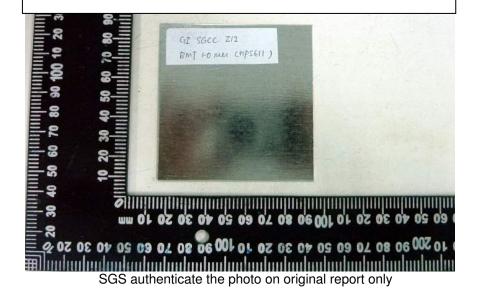
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Test Part Description:

Sample Description : GI SGCC Z12, BMT 1.0mm (HP5611)

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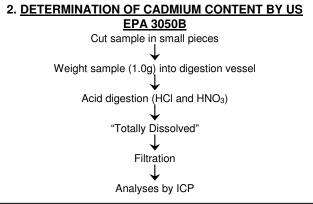


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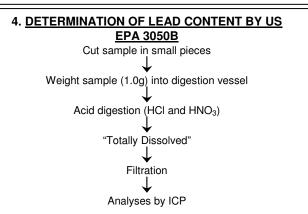
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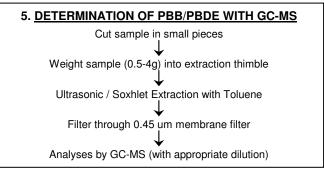
1. DETERMINATION OF HEXAVALENT CHROMIUM BY JIS H 8625 Sample Preparation Hot water extraction Add colour-developing reagent Let stand for 5-10 min Analyses by UV- Spectrophotometer (540 nm)



3. MICROWAVE ASSISTED ACID DIGESTION OF SILICEOUS AND ORGANICALLY BASED METRICES (US EPA 3052) Cut sample in small pieces Weight sample (0.2-0.5g) into digestion vessel Acid digestion (HF and HNO₃) – Microwave "Totally Dissolved" Filtration

Analyses by ICP





**** End of Report ****

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