

Test Report

No. CTSPN/00305/16

Date: 21/02/2016

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CTS Ref. CTSPN/16/0060/Premium

PREMIUM MULTI INDUSTRIES SDN BHD 15-1-16, MEDAN KAMPUNG RELAU, BAYAN POINT, 11900 PENANG

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

Sample Description : Himax Wax-Type Antirust HB-7

Sample Receiving Date : 17/02/2016

Testing Period : 17/02/2016 to 21/02/2016

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 : Tan Lin Wei & Hooi Yee Man

SGS LABORATORY SERVICES (M) SDN. BHD.

CHÓNG KIEN LEN B.Sc.(HONS) AMIC

SENIOR LAB MANAGER

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Test results:

<u>Test Part Description</u>:

Sample Description : Himax Wax-Type Antirust HB-7

RoHS Directive 2011/65/EU Annex II

Test Item(s):	Unit	Test Method	Results	MDL
Cadmium(Cd)	mg/kg	With reference to EPA Method 3052, 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 EPA Method 3060A & 7196A, and performed by UV-VIS Spectrophotometry	N.D.	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) Testing based on original basis

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<u>Test Part Description</u>:

Sample Description : Himax Wax-Type Antirust HB-7

PREMIUM MULTI INDUSTRIES SDN BHD CTSPN/00305/15



SGS authenticate the photo on original report only

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Test Report

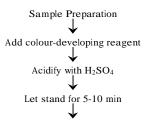
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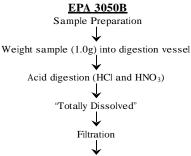
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1. <u>DETERMINATION OF HEXAVALENT CHROMIUM BY</u> METHOD US EPA 3060A/7196A



Analyses by UV- Spectrophotometer (540 nm)

2. DETERMINATION OF LEAD CONTENT BY US



Analyses by ICP

3. MICROWAVE ASSISTED ACID DIGESTION OF SILICEOUS AND ORGANICALLY BASED METRICES (US EDA 3052)

(US EPA 3052)
Sample Preparation

↓
Weight sample (0.2-0.5g) into digestion vessel
↓
Acid digestion (HF and HNO₃) – Microwave
↓
"Totally Dissolved"
↓
Filtration
↓
Analyses by ICP

4. DETERMINATION OF PBB/PBDE WITH GC-MS

Sample Preparation

Weight sample (0.5-4g) into extraction thimble

Ultrasonic / Soxhlet Extraction with Toluene

Filter through 0.45 um membrane filter

Analyses by GC-MS (with appropriate dilution)

**** End of Report ****

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