

Test Report No.: Q00221675a 001

Page 1 of 6

Client: A.M. RAMP & CO HONG KONG LIMITED

Room 2, 20/F, Malaysia Building, 50 Gloucester Road, Wanchai, Hong Kong

Test item(s): Screen Printing Ink**Identification/
Model No(s):**Screen Printing Ink
180PE2423, 180PE2424, 180PE30115, 180PE30116, 180PE30117, 180PE30118,
180PE50027, 180PE50028, 180PE60445, 180PE8432, 180PE1065, 180PE9028,
180PE0016, 180PE031, 180PE2170, 180PE2414, 180PE3452, 180PE30093,
180PE30634, 180PE3455, 180PE5434, 180PE5435, 180PE60038, 180PE8225,
180PE1026, 180PE9005, 180PE1000**Sample Receiving date:** 2013-04-08**Testing Period:** 2013-04-10 – 2013-04-15**Test specification:**

Customer Requirement:

Cadmium, Lead, Chromium VI, Mercury, Polybrominated biphenyls (PBB) and
Polybrominated diphenyl ethers (PBDE).According to RoHS (recast): Restriction of the Use of Certain Hazardous
Substances in Electrical and Electronic Equipment, 2011/65/EU.**Test result:**

PASS

Other Information:

Other information provided by client:

Country of Origin: Germany

For and on behalf of
TÜV Rheinland (Hong Kong) Ltd.

2013-04-19 Andy Ng/ Assistant Project Manager

Date

Name/Position

*Test result is drawn according to the kind and extent of tests performed.**This test report relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any safety mark on this or similar products.*

Test Report No.: Q00221675a 001

Page 2 of 6

Material list

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180PE1026, 180PE9005, 180PE1000

Material No.	Material	Color	Location
M001	Ink	Dark brown	Refer to photo

Test Report No.: Q00221675a 001

Page 3 of 6

1. Cadmium, Lead, Chromium VI, Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)

 Test method : Total Cadmium, Lead, Mercury, Chromium
 - Ref. to EN 62321:2009

 Chromium VI – Ref. to EN 62321:2009
 (for Leather Material, Chromium VI - Ref. to ISO 17075:2007)

PBBs, PBDEs – Ref. to EN 62321:2009

Material list

Material No.	Material	Color	Remark	Test plan
				A= Test HM only B = Test FR only C = Test HM + FR
M001	Ink	Dark brown	Refer to photo	C

 Abbreviation: HM (Heavy metal) = Cd, Pb, Hg, Cr VI
 FR (Flame Retardant) = PBBs, PBDEs

Test result:

	Cd	Cr (VI)	Pb	Hg	PBBs ^(*)	PBDEs ^(*)
Maximum permissible Limit (mg/kg)	100	1000	1000	1000	1000	1000

Material No.	(mg/kg)					
	Cd	Cr [^]	Pb	Hg	PBBs ^(*)	PBDEs ^(*)
	RL (mg/kg)					
	10	10	10	10	5	5
M001	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.

 Abbreviation: Pb = Lead
 Cd = Cadmium
 Hg = Mercury
 Cr = Chromium
 Cr (VI) = Chromium (VI)
 PBBs = Total Polybrominated Biphenyls
 PBDEs = Total Polybrominated Diphenyl Ethers
 n.d. = Not Detected (< Reporting Limit)
 RL = Reporting Limit
 N.A. = Not Applicable
 ^ = The total Chromium have been determined.
 mg/kg = milligram per kilogram

Test Report No.: Q00221675a 001

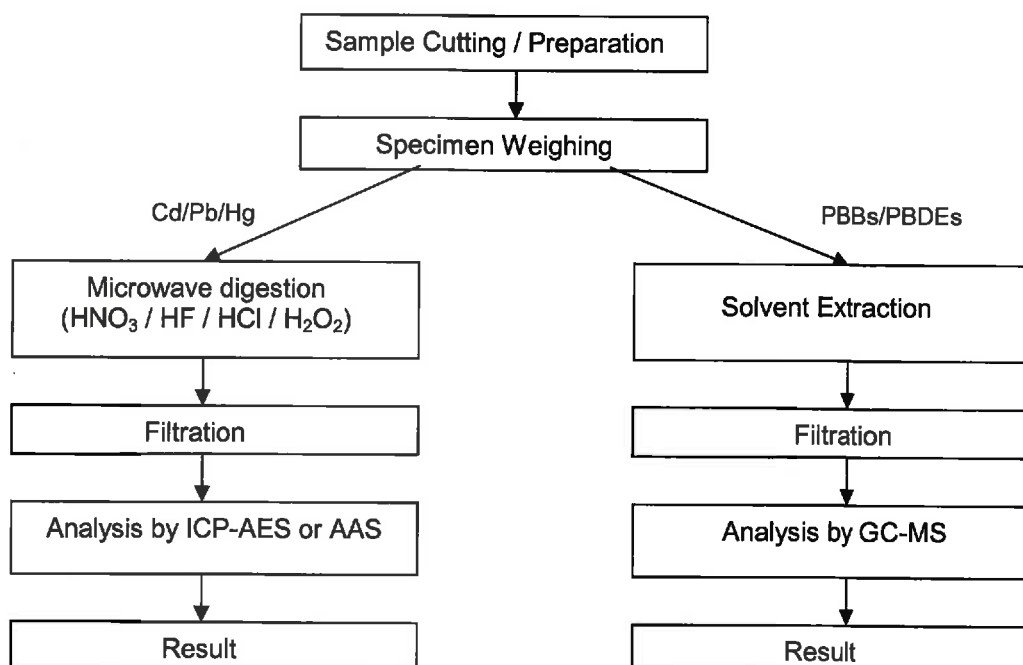
Page 4 of 6

Remark:

*1 The plating / coating of all the metal sample(s) is not confirmed, it cannot be further mechanically disjointed into different materials.

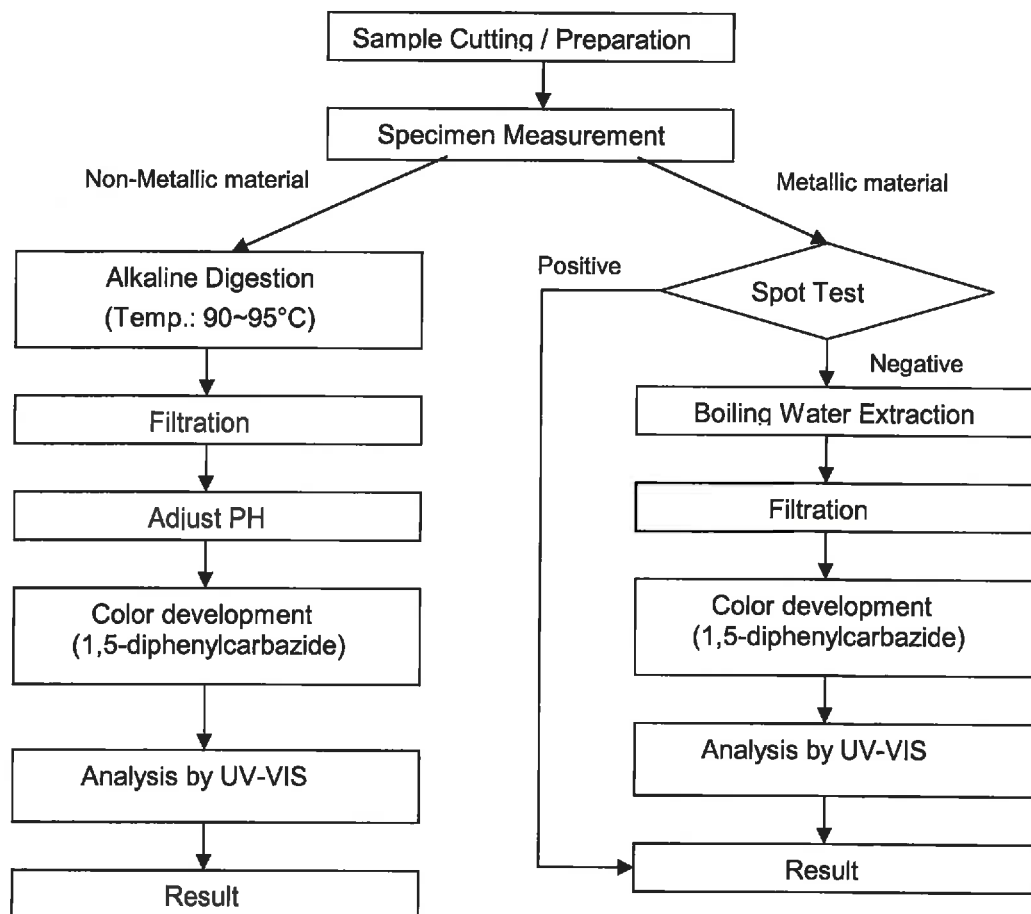
* The reporting limit for each individual PBBs and individual PBDEs are:

Reporting Limit (mg/kg)		
PBBs	Bromobiphenyl	1
	Dibromobiphenyl	1
	Tribromobiphenyl	1
	Tetrabromobiphenyl	1
	Pentabromobiphenyl	2
	Hexabromobiphenyl	2
	Heptabromobiphenyl	2
	Octabromobiphenyl	5
	Nonabromobiphenyl	5
	Decabromobiphenyl	5
PBDEs	Bromodiphenylether	1
	Dibromodiphenyl ether	1
	Tribromodiphenyl ether	1
	Tetrabromodiphenyl ether	1
	Pentabromodiphenyl ether	2
	Hexabromodiphenyl ether	2
	Heptabromodiphenyl ether	2
	Octabromodiphenyl ether	5
	Nonabromodiphenyl ether	5
	Decabromodiphenyl ether	5

Annex:
1. Testing Flow Chart for Cadmium (Cd) / Lead (Pb) / Mercury (Hg) / PBBs & PBDEs


Test Report No.: Q00221675a 001

Page 5 of 6

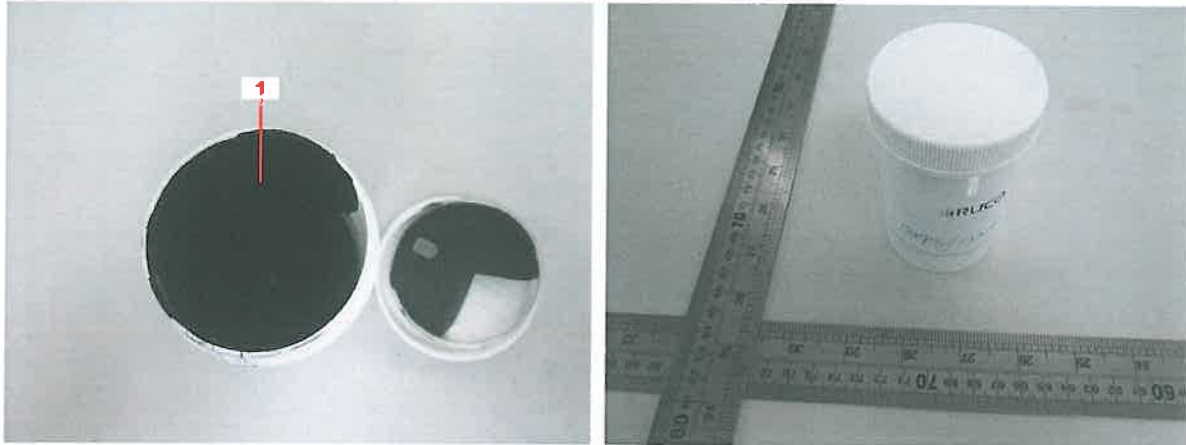
2. Testing Flow Chart for Chromium (VI)

Testing Laboratory accredited by DAkkS according to DIN EN ISO/IEC 17025. The accreditation is valid for the test methods stated in the certificate.

Test Report No.: Q00221675a 001

Page 6 of 6

Sample Photo:



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