Test Report

Number : TWNC00117465S1

Applicant: Park Advanced Product Development
1555 West 10th Street, Tempe, AZ, USA, 85281

Date : Jun 23, 2009

This is to supersede report No. TWNC00117465 dated May 15, 2009.

Sample Description:
One (1) Group Of Submitted Samples Said To Be :

Sample Description	:	D6300 (Mercurywave™ 9350)
Country Of Origin	:	U.S.A.
Date Sample Received	:	May 07, 2009 / Jun 19, 2009
Date Test Started	:	May 07, 2009 / Jun 19, 2009

Test Conducted :
As Requested By The Applicant, For Details Please Refer To Attached Pages.

Authorized By:
On Behalf Of Intertek Testing Services Taiwan Limited

K. Y. Liang
Director

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401

Number : TWNC00117465S1

Test Conducted

(I) Test Result Summary:

Testing Item	Result (ppm)
	Cream Paste
Heavy Metal	
Cadmium (Cd) Content	ND
Lead (Pb) Content	ND
Mercury (Hg) Content	ND
Chromium VI (Cr^{6+}) Content	ND
Polybrominated Biphenyls (PBBs)	
Monobrominated Biphenyls (MonoBB)	ND
Dibrominated Biphenyls (DiBB)	ND
Tribrominated Biphenyls (TriBB)	ND
Tetrabrominated Biphenyls (TetraBB)	ND
Pentabrominated Biphenyls (PentaBB)	ND
Hexabrominated Biphenyls (HexaBB)	ND
Heptabrominated Biphenyls (HeptaBB)	ND
Octabrominated Biphenyls (OctaBB)	ND
Nonabrominated Biphenyls (NonaBB)	ND
Decabrominated Biphenyl (DecaBB)	ND
Polybrominated Diphenyl Ethers (PBDEs)	
Monobrominated Diphenyl Ethers (MonoBDE)	ND
Dibrominated Diphenyl Ethers (DiBDE)	ND
Tribrominated Diphenyl Ethers (TriBDE)	ND
Tetrabrominated Diphenyl Ethers (TetraBDE)	ND
Pentabrominated Diphenyl Ethers (PentaBDE)	ND
Hexabrominated Diphenyl Ethers (HexaBDE)	ND
Heptabrominated Diphenyl Ethers (HeptaBDE)	ND
Octabrominated Diphenyl Ethers (OctaBDE)	ND
Nonabrominated Diphenyl Ethers (NonaBDE)	ND
Decabrominated Diphenyl Ether (DecaBDE)	ND
Organotin Compounds	
Tributyltin Compounds Included TBTO	ND
Triphenyltin Compounds	ND

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401

Number : TWNC00117465S1

Test Conducted

(I) Test Result Summary:

Testing Item	Result (ppm)
	Cream Paste
Azo Dyes Compounds (Specific Amine)	
4-Aminobiphenyl	ND
Benzidine	ND
4-Chloro-O-Toluidine	ND
2-Naphthylamine	ND
O-Aminoazotoluene	ND
2-Amino-4-Nitrotoluene	ND
P-Chloroaniline	ND
2,4-Diaminoanisole	ND
4,4'-Diaminobiphenylmethane	ND
3,3'-Dichlorobenzidine	ND
3,3'-Dimethoxybenzidine	ND
3,3'-Dimethylbenzidine	ND
3,3'-Dimethyl-4,4'-Diaminobiphenylmethane	ND
P-Cresidine	ND
4,4'-Methylene-Bis-(2-Chloroaniline)	ND
4,4'-Oxydianiline	ND
4,4'-Thiodianiline	ND
O-Toluidine	ND
2,4-Toluylendiamine	ND
2,4,5-Trimethylaniline	ND
O-Anisidine	ND
4-Aminoazobenzene	ND
2,4-Xylidine	ND
2,6-Xylidine	ND
Ozone Depleting Substances (ODS)	
Chlorofluorocarbon (CFCs) (Class I, Group I)	ND
Halon (Class I, Group II)	ND
Chlorofluorocarbon (CFCs) (Class I, Group III)	ND
Carbon Tetrachloride (CCl4)(Class I, Group IV)	ND
1,1,1-Trichloroethane (Class I, Group V)	ND
Bromomethane (Class I, Group VI)	ND
Hydrobromofluorocarbon (HBFCs) (Class I, Group VII)	ND
Chlorobromomethane (Class I, Group VIII)	ND
Hydrochlorofluorocarbon (HCFCs) (Class II)	ND

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401

Number : TWNC00117465S1

Test Conducted

(I) Test Result Summary:

Testing Item	Result (ppm) Cream Paste
Aliphatic Chlorinated Hydrocarbons	
Dichloromethane	ND
1,1-Dichloroethane	ND
1,2-Dichloroethane	ND
1,1-Dichloroethylene	ND
Trans-1,2-Dichloroethylene	ND
Cis-1,2-Dichloroethylene	ND
1,3-Dichloropropene	ND
Trichloromethane	ND
1,1,1-Trichloroethane	ND
1,1,2-Trichloroethane	ND
Trichloroethylene	ND
1,1,1,2-Tetrachloroethane	ND
1,1,2,2-Tetrachloroethane	ND
Tetrachloroethylene	ND
Pentachloroethane	ND
Hexachlorobenzene (HCB)	ND
Halogen Content	
Bromine (Br)	11274
Others	
Polychlorinated Biphenyls (PCBs)	ND
Polychlorinated Naphthalenes (PCNs)	ND
Tetrabromobisphenol A (TBBPA)	ND
Formaldehyde	ND
Polyvinyl Chloride (PVC)	Negative
Asbestos	Negative
Bisphenol-A	33699

Remarks: ppm = parts per million based on wet weight of tested sample = mg/kg
ND = Not Detected

Responsibility Of Chemist : Irene Chiou / Kevin Liu / Cathy Chen

Date Sample Received : May 07, 2009
Testing Period : May 07, 2009 To Jun 23, 2009

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401

Number : TWNC00117465S1

Test Conducted

(Ⅱ) Rohs Requirement:

Restricted Substances	Limits
Cadmium (Cd) Content	0.01% (100ppm)
Lead (Pb) Content	0.1% (1000ppm)
Mercury (Hg) Content	0.1% (1000ppm)
Chromium VI (Cr^{6+}) Content	0.1% (1000ppm)
Polybrominated Biphenyls (PBBs)	0.1% (1000ppm)
Polybrominated Diphenyl Ehters (PBDEs)	0.1% (1000ppm)

The above limits were quoted from 2002/95/EC and amendment 2005/618/EC for homogeneous material.

(Ⅲ) Test Method:

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Lead (Pb) content	With reference to IEC 62321 edition 1.0:2008 in clause 8/9/10, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Mercury (Hg) content	With reference to IEC 62321 edition 1.0:2008 in clause 7, by microwave digestion until the tested samples are totally dissolved and determined by ICP-OES.	2 ppm
Chromium VI (Cr^{6+}) content	With reference to IEC 62321 edition 1.0:2008 in annex C, by alkaline digestion and determined by UV-Vis spectrophotometer.	1 ppm
Polybrominated Biphenyls (PBBs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401

Test Conducted

(Ⅲ) Test Method:

Testing Item	Testing Method	Reporting Limit
Polybrominated Diphenyl Ethers (PBDEs)	With reference to IEC 62321 edition 1.0:2008 in annex A, by solvent extraction and determined by GC-MSD and further HPLC confirmation when necessary.	5 ppm
Organotin Compounds	With reference to DIN 38407-13, by solvent extraction and determined by GC-MSD	0.03 ppm
Azo Dyes Compounds (Specific Amine)	With reference to EN 14362-1:2003 and determined by GC-MSD	5 ppm
Ozone Depleting Chemical Substitutes	With reference to USEPA 5021 / 8260B and determined by GC-MSD linked with headspace	1 ppm
Hexachlorobenzene(HCB)	With Reference To USEPA 3540C / 8081A, by solvent extraction and determined by GC-ECD or GC-MSD	0.05ppm
Aliphatic Chlorinated Hydrocarbons (Except HCB)	With reference to USEPA 5021 / 8260B and determined by GC-MSD linked with headspace	1 ppm
Halogen Content	With reference to EN 14582:2007 by combustion flask with oxygen and determined by ion chromatography	50 ppm
Polychlorinated Biphenyls (PCBs)	With reference to USEPA 3540C / 8082A, by solvent extraction and determined by GC-ECD or GC-MSD	1 ppm
Polychlorinated Naphthalenes (PCNs)	With reference to USEPA 3540C / 8081B, by solvent extraction and determined by GC-ECD or GC-MSD	10 ppm
Tetrabromobisphenol A	With reference USPA 3540C, by solvent extraction and determined by GC-MSD	20 ppm
Formaldehyde	With reference to ISO/TS 17226 and determined by HPLC-DAD	5 ppm
Polyvinyl Chloride (PVC)	Beilstein's test (Flame test) and FT-IR analysis	NA
Asbestos	FT-IR analysis	NA
Bisphenol-A	By solvent extraction and determined by HPLC-DAD or GC-MSD	5 ppm

Remarks: NA = Not applicable
Reporting Limit = Quantitation limit of analyte in sample

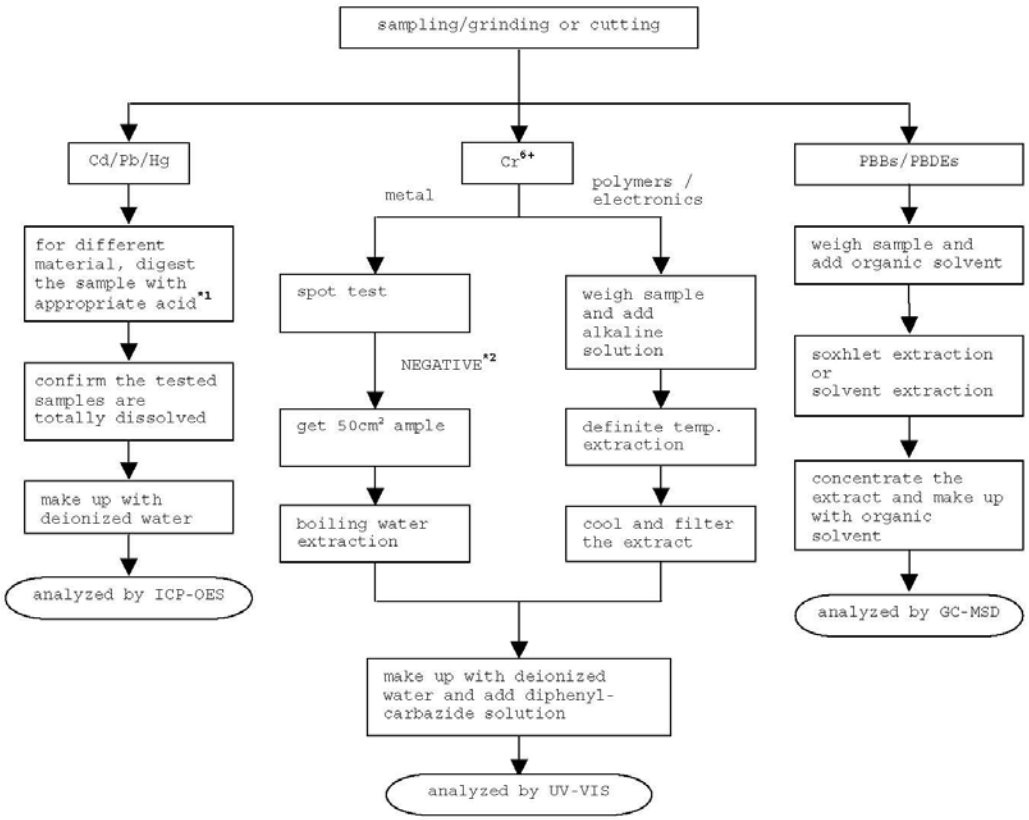
Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401

Number : TWNC00117465S1

Test Conducted

(Ⅳ) Measurement Flowchart:

Test For Cd/Pb/Hg/Chromium (VI)/PBBs/PBDEs Contents
Reference Standard: IEC 62321 edition 1.0:2008



Remarks:

*1: List Of Appropriate Acid:

Material	Acid Added For Digestion
Polymers	HNO_3, HCl, HF, H_2O_2, H_3BO_3
Metals	HNO_3, HCl, HF
Electronics	HNO_3, HCl, H_2O_2, HBF_4

*2: If the result of spot test is positive, Chromium VI would be determined as detected.

End Of Report

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401

Number : TWNC00117465S1

Test Conducted

Photo

Intertek Testing Services Taiwan Ltd.
8F., No. 423, Ruiguang Rd., Neihu District, Taipei 114, Taiwan, R.O.C.
全國公證檢驗股份有限公司
114 台北市內湖區瑞光路 423 號 8 樓
Tel: (+886-2) 6602-2888 · 2797-8885 Fax: (+886-2) 6602-2400 · 6602-2401