Rohs Screening Analysis Report Number : TWNC00125743

Applicant: Cactus Technologies Ltd
Suite C 15/F Capital Trade Center
62 Tsun Yip Street Kwun Tong
Kowloon Hong Kong

Date : Jul 27, 2009

Sample Description:
One (1) group of submitted samples said to be :

Sample Description	:	SSD 2.5" SATAII Flash Drive The symbol of xxx can be 0~9 or blank to indicate the capacity of SDD. The symbol of y can be M or G to indicate the unit of capacity. M:megabyte,G:gigabyte. The symbol of z can be R or F to indicate the SSD type as removable or fixed. (1)Printed plastic sticker (2)Black metal enclosure (3)SATA connector - black plastic socket (4)SATA connector - coppery metal pin (5)PCBA (connector was excluded) (6)Black metal screw on enclosure
Style / Item No.	:	KDxxxyz(I)-602S
Date Sample Received	:	Jul 17, 2009
Date Test Started	:	Jul 20, 2009

Test Conducted:
As requested by the applicant, for details please refer to attached pages.

Conclusion:
Please see page two.

Authorized By:
On Behalf Of Intertek Testing Services
Taiwan Limited

INTERTEK TESTING SERVICES TAIWAN LTD.

K. Y. Liang
Director

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Conclusion:

Tested Samples	Standard	Result
Screening components of submitted samples	With reference to test method of IEC 62321 edition 1.0:2008 chapter 6, screening by XRF spectroscopy and chemical confirmation test for RoHS directive (2002/95/EC)	Pass

Remark:

As requested by the applicant, only components shown in this report were screened by XRF spectroscopy for 2002/95/EC. Other components were not screened in this report.

Chemical confirmation tests were conducted to verify the inconclusive results of XRF tests.

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Test Conducted

The RoHS screening analysis is performed by an ED-XRF (energy dispersive X-ray fluorescence) analyzer. The analyzer determines the chemistry of a screened component by measuring the spectrum of characteristic X-ray emitted by different elements in the sample, which subjected to X-ray radiation. In the way the analyzer is able to determine which element in the periodic system that is present in screened components.

Determination of total value of regulated substances in electro technical products, elements of cadmium (Cd), lead (Pb), mercury (Hg), chromium (Cr) and bromine (Br) content were measured by XRF spectroscopy for RoHS restricted substances. The analyzer is therefore unable to determine if it is PBB, PBDE, Cr(VI) or non restricted bromine and chromium substances in the sample.

(Ⅰ) Test Result Summary:

Screened Component	XRF Result			Chemical Confirmation Result (ppm)
	Element	Screened Result (ppm)	Conclusion	
(1)	Cd	ND	Pass	Not Tested
	Pb	ND	Pass	
	Hg	ND	Pass	
	Cr	ND	Pass	
	Br	ND	Pass	
(2)	Cd	ND	Pass	Cr^{6+}: Negative (<0.02mg/kg with 50cm^2)
	Pb	216	Pass	
	Hg	ND	Pass	
	Cr	6204	Inconclusive	
	Br	NA	NA	
(3)	Cd	ND	Pass	Not Tested
	Pb	ND	Pass	
	Hg	ND	Pass	
	Cr	ND	Pass	
	Br	ND	Pass	
(4)	Cd	ND	Pass	Not Tested
	Pb	ND	Pass	
	Hg	ND	Pass	
	Cr	ND	Pass	
	Br	NA	NA	

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Test Conducted

(Ⅰ) Test Result Summary:

Screened Component	XRF Result			Chemical Confirmation Result (ppm)
	Element	Screened Result (ppm)	Conclusion	
(5)(#)	--	--	--	Cd: ND Pb: 9 Hg: ND Cr^{6+}: ND PBBs: ND PBDEs: ND
	--	--	--	
	--	--	--	
	--	--	--	
	--	--	--	
(6)	Cd	ND	Pass	Not Tested
	Pb	ND	Pass	
	Hg	ND	Pass	
	Cr	ND	Pass	
	Br	NA	NA	

Remarks: ppm = Parts per million = mg/kg
ND = Not detected and pass, the screened sample is found to be under detection limit of table Ⅲ.
Inconclusive = the screened component may have potential non-compliance and confirmation testing by wet chemical analysis may be desired to obtain a quantitative result.
Pass = The screened component is found to be pass and below the lower screening threshold limit of table Ⅱ.
NA = Not applicable
# = Samples were ground and randomly selected for test.
Negative = A Negative test result indicated positive observation was not found at the time of testing.

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Test Conducted

(Ⅱ) XRF screening limits in mg/kg for regulated elements in various matries.

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	P ≤ 70 < X < 130 ≤ F	P ≤ 70 < X < 130 ≤ F	P ≤ 70 < X < 150 ≤ F
Pb	P ≤ 700 < X < 1300 ≤ F	P ≤ 700 < X < 1300 ≤ F	P ≤ 500 < X < 1500 ≤ F
Hg	P ≤ 700 < X < 1300 ≤ F	P ≤ 700 < X < 1300 ≤ F	P ≤ 500 < X < 1500 ≤ F
Cr	P ≤ 700 < X	P ≤ 700 < X	P ≤ 500 < X
Br	P ≤ 300 < X	Not applicable	P ≤ 250 < X

P = Pass
X = Inconclusive result
F = Fail
mg/kg = Milligram per kilogram = ppm

(Ⅲ) Estimated detection limits in mg/kg for regulated elements in various matrices.

Element	Polymer Materials	Metallic Materials	Composite Materials
Cd	50	70	70
Pb	100	200	200
Hg	100	200	200
Cr	100	200	200
Br	200	Not Applicable	200

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Test Conducted

(Ⅳ) 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 (for non-material)	With reference to IEC 62321 edition 1.0:2008 in annex C, by alkaline digestion and determined by UV-Vis spectrophotometer.	1 ppm
Chromium VI (Cr^{6+}) content (by spot test on metal)	With reference to IEC 62321 edition 1.0:2008 in annex B, by spot test.	Negative (< 1 mg/kg)
Chromium VI (Cr^{6+}) content (by boiling water extraction on metal) (mg/kg with $50cm^2$)	With reference to IEC 62321 edition 1.0:2008 in annex B, by boiling water extraction and determined by UV-Vis spectrophotometer.	0.02 mg/kg with $50cm^2$
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
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

Remark : Reporting Limit = Quantitation limit of analyte in sample

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Disclaimers:
The numerical test data of this XRF screening report is for reference purposes only due to the data variation incurred from various factors as described in next paragraph. The applicant shall make its/his/her own judgment as to whether the information provided in this XRF screening report is sufficient for its/his/her purposes.

The results shown in this XRF screening report will differ based on various factors, including but not limited to, the sample size, thickness, area, surface flatness, equipment parameters and matrix effect (e.g. plastic, rubber, metal, glass, ceramic etc.). Further wet chemical pre-treatment with relevant chemical equipment analysis are required to obtain quantitative data.

(V) RoHS Requirement:

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

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

End Of Report

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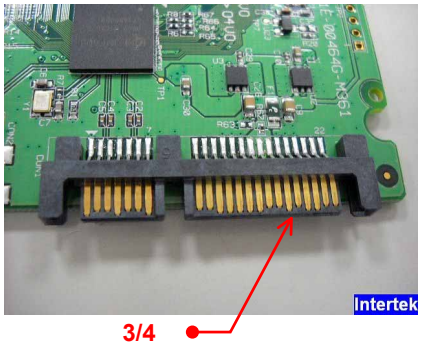
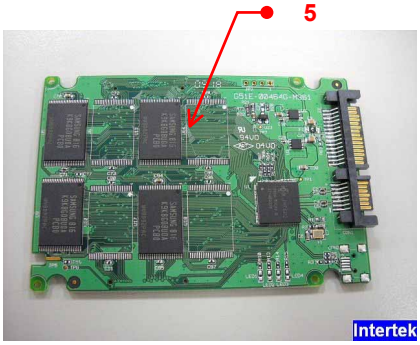
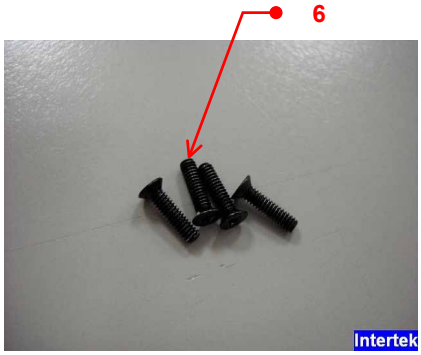
Test Conducted

Photo







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