TEST REPORT

Technical Report: **(8714)337-0050** **December 05, 2014**

Date Received: **December 03, 2014**

EXCELERTHINGS
7/729(A), MANNUTHY P.O, THRISSUR-680651, KERALA, INDIA

CONTACT PERSON: Mr. C.P.AUGUIN

Sample Description: ELECTRA FILL (EARTHING COMPOUND)
Sample received in good condition

Part:	/	Quantity:	/
Technical Data:	/	Special Process:	/
Homogenous Parts:	/	Style No.	/
Color:	SILK GREY	PO No.:	/
Component:	/	Batch No.:	/
Model No.:	/	Product End Use:	/
Age Grade:	/	Retest No.:	/
Vendor:	/	Buying Agent:	/
Manufacturer:	EXCELERTHINGS	Country of Origin:	/
Buyer:	/	Country of Destination:	/
Test Period:	December 03, 2014 to December 05, 2014		

SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION	REMARK
European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)	PASS	See Results

Note:

1. The test has been conducted as per vendor's request.

REMARK

If there are questions or concerns on this report, please contact: Phone# 080-40701600/645
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BUREAU VERITAS CONSUMER PRODUCTS SERVICES (INDIA) PVT. LTD.
AUTHORIZED SIGNATORIES

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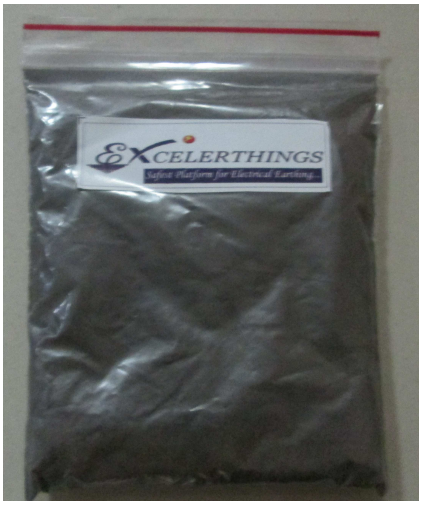
Photo of the Submitted Sample



TEST RESULT

European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method **:** With reference to EN 62321: 2009, Clause 8,9 & 10

Test Item(s)	Item / Component Description(s)
A	ELECTRA FILL (EARTHING COMPOUND)

-	Result				
Parameter	Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Chromium (Cr VI)	**Conclusion**
Unit	mg/kg	mg/kg	mg/kg	mg/kg	-
Test Item(s)	-	-	-	-	-
A	ND	ND	ND	ND	PASS

Note / Key :

BL = Below limit OL = Over limit M = Marginal
NR = Not requested mg/kg = milligram(s) per kilogram = ppm = part(s) per million
% = percent 10000 mg/kg = 1 % NA = Not applicable
Detection Limit: See Appendix.

Remark :

- Result(s) may be different to the actual content based on various factors including, but not limit to, sample size, thickness, area, non-uniformity composition, surface flatness.
- When the result(s) is (are) marginal, it is recommended to further perform related wet chemistry method for confirmation. See interpretation of result(s) in Appendix.
- Only selected example(s) is (are) indicated on the photograph(s) in Comment.

Comment :

TEST RESULT

Flame Retardants Content - European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

Test Method : With reference to EN 62321: 2009, Annex A

Test Item(s)	Item / Component Description(s)
A	ELECTRA FILL (EARTHING COMPOUND)

See Analytes (Parameter) and their corresponding Maximum Allowable Limit (Req.) in Result Table	**Type I**	**Metallic material**
	Type II	**Glass or ceramic material**
	Type III	**Other non-metallic material except Type II**

-	Unit	Req.	Result
Test Item(s)	-	-	A
Type	-	III	III
Parameter	-	-	-
PBBs	mg/kg	1000	N.D
MonoBB	mg/kg	-	N.D
DiBB	mg/kg	-	N.D
TriBB	mg/kg	-	N.D
TetraBB	mg/kg	-	N.D
PentaBB	mg/kg	-	N.D
HexaBB	mg/kg	-	N.D
HeptaBB	mg/kg	-	N.D
OctaBB	mg/kg	-	N.D
NonaBB	mg/kg	-	N.D
DecaBB	mg/kg	-	N.D
PBDEs	mg/kg	1000	N.D
MonoBDE	mg/kg	-	N.D
DiBDE	mg/kg	-	N.D
TriBDE	mg/kg	-	N.D
TetraBDE	mg/kg	-	N.D
PentaBDE	mg/kg	-	N.D
HexaBDE	mg/kg	-	N.D
HeptaBDE	mg/kg	-	N.D
OctaBDE	mg/kg	-	N.D
NonaBDE	mg/kg	-	N.D
DecaBDE	mg/kg	-	N.D
Conclusion	-	-	**PASS**

Note / Key :

ND = Not detected "**>**" = Greater than Req. = Requirement
NR = Not requested mg/kg = milligram(s) per kilogram = ppm = part(s) per million
% = percent 10 000 mg/kg = 1 %
Detection Limit (mg/kg) :
For Type I - Each (Pb, Cd & Hg) : 2.0
For Type II - Each (Pb, Cd, Hg & Cr VI) : 2.0
For Type III - Metal, Polymers & Electronics - Each (Pb, Cd, Hg & Cr VI) : 2.0; Each (PBBs & PBDEs) : 50;
Others - Each (Pb, Cd & Hg) : 2.0; Cr VI : 3.0; Each (PBBs & PBDEs) : 50

Remark :

- The list of analytes is summarized in table of Appendix.

APPENDIX

List of Analytes and their Corresponding Detection Limit and Maximum Allowable Limit [Preliminary Screening Assessment for European Council Directive 2011/65/EU] :			
No.	**Name of Analytes**	**Detection Limit (mg/kg)**	**Maximum Allowable Limit (mg/kg)**
		Wet Chemistry	
1	Lead (Pb)	10	1000
2	Cadmium (Cd)	10	100
3	Mercury (Hg)	10	1000
4	Chromium (Cr)	NA	NA
5	Chromium VI (Cr VI)	10	1000
6	Bromine (Br)	NA	NA
	NA = Not applicable		

Interpretation of Result(s) [Preliminary Screening Assessment for European Council Directive 2011/65/EU] :			
Element	**Non-metal**	**Metal**	**Composite material**
Lead (Pb)	$BL \leq (700 - 3\sigma) < X < (1300 + 3\sigma) \leq OL$	$BL \leq (700 - 3\sigma) < X < (1300 + 3\sigma) \leq OL$	$BL \leq (500 - 3\sigma) < X < (1500 + 3\sigma) \leq OL$
Cadmium (Cd)	$BL \leq (70 - 3\sigma) < X < (130 + 3\sigma) \leq OL$	$BL \leq (70 - 3\sigma) < X < (130 + 3\sigma) \leq OL$	$BL < X < (150 + 3\sigma) \leq OL$
Mercury (Hg)	$BL \leq (700 - 3\sigma) < X < (1300 + 3\sigma) \leq OL$	$BL \leq (700 - 3\sigma) < X < (1300 + 3\sigma) \leq OL$	$BL \leq (500 - 3\sigma) < X < (1500 + 3\sigma) \leq OL$
Chromium (Cr)	$BL \leq (700 - 3\sigma) < X$	$BL \leq (700 - 3\sigma) < X$	$BL \leq (500 - 3\sigma) < X$
Bromine (Br)	$BL \leq (300 - 3\sigma) < X$	-	$BL \leq (250 - 3\sigma) < X$
	X = Region considers as marginal result 3σ = Repeatability of XRF analyser at action level		

List of Analytes and their Corresponding Test Methods [European Council Directive 2011/65/EU] :		
No.	**Name of Analytes**	**Test Method(s)**
1	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	With reference to EN 62321: 2009, Annex A.
2	Polybromodiphenyl ethers (PBDEs) - Bromodiphenyl ether (MonoBDE) - Dibromodiphenyl ether (DiBDE) - Tribromodiphenyl ether (TriBDE) - Tetrabromodiphenyl ether (TetraBDE) - Pentabromodiphenyl ether (PentaBDE) - Hexabromodiphenyl ether (HexaBDE) - Heptabromodiphenyl ether (HeptaBDE) - Octabromodiphenyl ether (OctaBDE) - Nonabromodiphenyl ether (NonaBDE) - Decabromodiphenyl ether (DecaBDE)	
[a]	The principle of this method was evaluated and supported by two studies organized by IEC TC 111 WG3. These studies were focused on detecting the presence of Cr VI in the corrosion protection coatings on metallic samples.	

END OF REPORT