Steiner GmbH & Co. KG
Attn.: Mr. R.-H. Spies (PhD)
Jägersgrund 1
57339 Erndtebrück
Germany

DAkkS Deutsche Akkreditierungsstelle
D-PL-14115-02
Gegenprobensachverständige nach § 43 LFGB

The following samples were submitted and identified by/on behalf of the client as

SGS Job file	:	3555697
Order date	:	17/NOV/2015
Order number	:	EB-6010864 / 04/NOV/2015
Sample receiving Date	:	05/NOV/2015
Testing period	:	17/NOV/2015 – 08/DEC/2015

Sample No	Sample designation
151024017	Sample 3: Al- coated Polyethleneterphthalate (PET) film

Test requested : In accordance with the RoHS Directive 2011/65/EU and subsequent amendments

Test Method(s)

(1) Determination of Cadmium by ICP-OES, acc. IEC 62321-5:2013
(2) Determination of Lead by ICP-OES, acc. IEC 62321-5:2013
(3) Determination of Mercury by CV-AAS, acc. IEC 62321-4:2013
(4) Determination of Chromium by ICP-OES, acc. IEC 62321-5:2013
(5) Determination of Chromium (VI) by photometry (metallic samples) or Ion chromatography (plastic and electronic sample material), acc. IEC 62321:2008
Remark: Due to its highly reactive nature the concentration of CrVI in a corrosion-protection changes drastically with time and storage conditions. The results obtained by IEC 62321: 2008, B5 can therefore only give an indication of the presence/absence of Cr(VI) within the limitations of the method at the time of testing. Please refer also to the statement given in IEC 62321: 2008, B1.
(6) Determination of PBB/PBDE by GC/MS, acc. IEC 62321-6:2015
Remark: Please note that acc. to IEC the testing of metals for PBB/PBDE is gratuitous

Test Result(s) : Please refer to next page(s)

Conclusion : Based on the performed tests on submitted sample(s), the test results of Lead, Mercury, Cadmium, hexavalent Chromium, Polybrominated Biphenyls(PBB) and Polybrominated Diphenyl Ethers (PBDE) **comply with** the limits as set by RoHS Directive 2011/65/EU, Annex 2 and subsequent amendments

Signed for and on behalf of
SGS INSTITUT FRESENIUS GmbH

i.V.
Wera Leonhard / ar
Projektleiterin / Project Manager

i.A.
Dr. Nadine Meichsner
Projektleiterin / Project Manager

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Die Prüfergebnisse beziehen sich auf die untersuchten Proben. Die Veröffentlichung und Vervielfältigung unserer Prüfberichte und Gutachten zu Werbezwecken sowie deren auszugsweise Verwendung in sonstigen Fällen bedürfen unserer schriftlichen Genehmigung. Alle Dienstleistungen werden auf Grundlage der anwendbaren Allgemeinen Geschäftsbedingungen der SGS, die auf Anfrage zur Verfügung gestellt werden, erbracht.

Geschäftsführer: Stefan Steinhardt, Aufsichtsratvorsitzender: Dirk Hellemans, Sitz der Gesellschaft: Taunusstein, HRB 21543 Amtsgericht Wiesbaden

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Test results by chemical method
(Unit: mg/kg)

Sample No.		151024017		
Test Item(s):	Method (refer to)		RL	RoHS Limit
Cadmium(Cd)	(1)	n.d.	1	100
Lead (Pb)	(2)	n.d.	10	1000
Mercury (Hg)	(3)	n.d.	0,5	1000
Chromium, hexavalent (Cr(VI))	(5)	n.d.	1	1000
Sum of PBDEs	(6)	**-**	-	1000 (Sum of polybrominated diphenyl ether)
Monobromodiphenyl ether		n.d.	50	
Dibromodiphenyl ether		n.d.	50	
Tribromodiphenyl ether		n.d.	50	
Tetrabromodiphenyl ether		n.d.	50	
Pentabromodiphenyl ether		n.d.	50	
Hexabromodiphenyl ether		n.d.	50	
Heptabromodiphenyl ether		n.d.	50	
Octabromodiphenyl ether		n.d.	50	
Nonabromodiphenyl ether		n.d.	50	
Decabromodiphenyl ether		n.d.	50	
Sum of PBBs		**-**	-	1000 (Sum of polybrominated biphenyls)
Monobromobiphenyl		n.d.	50	
Dibromobiphenyl		n.d.	50	
Tribromobiphenyl		n.d.	50	
Tetrabromobiphenyl		n.d.	50	
Hexabromobiphenyl		n.d.	50	
Pentabromobiphenyl		n.d.	50	
Heptabromobiphenyl		n.d.	50	
Octabromobiphenyl		n.d.	50	
Nonabromobiphenyl		n.d.	50	
Decabromobiphenyl		n.d.	50	

Note : mg/kg = ppm n.d.= not Detected RL = Report Limit n.a.= not analyzed

**= elevated reporting limit due to matrix interferences

The analytical findings are only valid for the sample as analyzed. Written acknowledgement for publication and duplication of our analytical reports for promotional purpose, as well as fractional use for other purposes mandatory. Electronically submitted results are for your information only. For legally binding results refer to the originally signed analytical report. Numbers following „<“ represent limits of quantification. Determination of parameters marked with * was performed with a cooperation partner.

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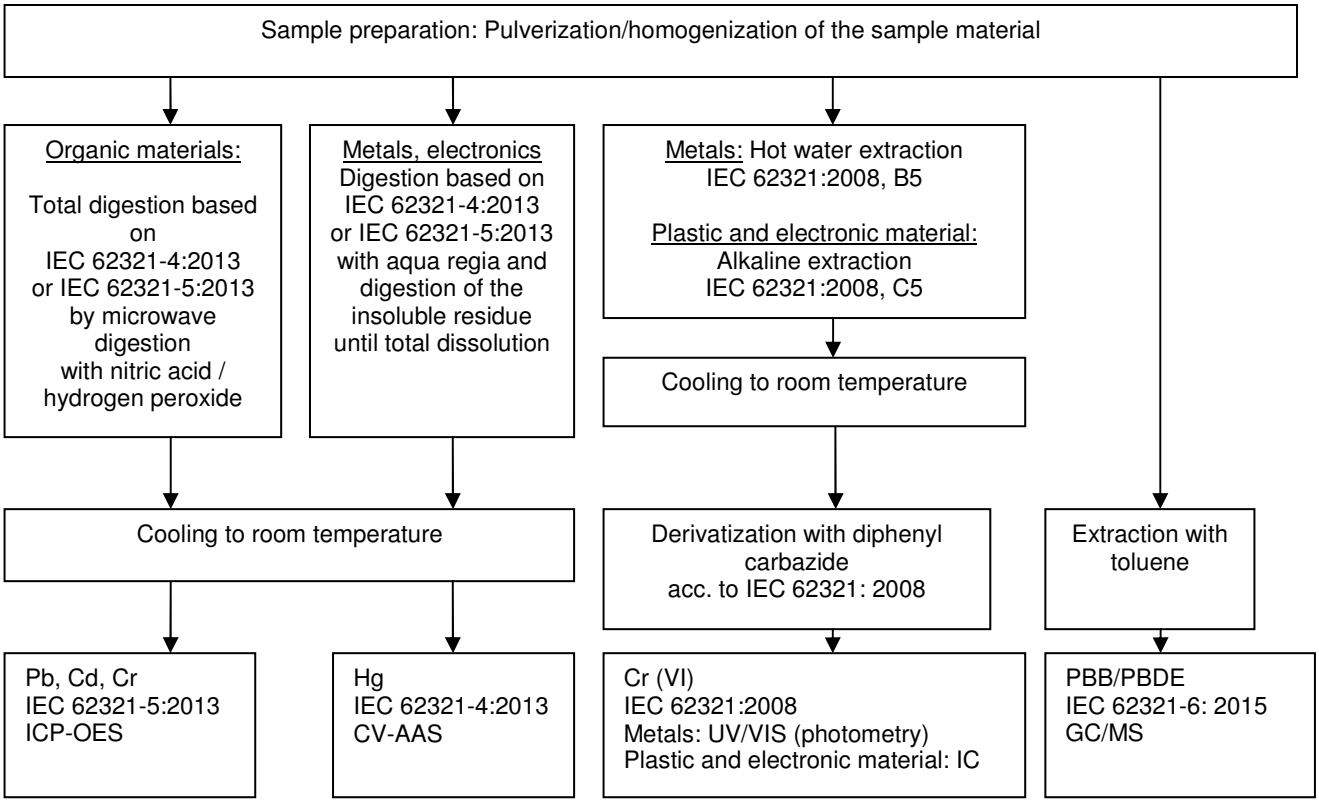
Flow Chart for the working flow of the performed analysis



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Sample Photo(s)

End of Report

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