

1.) Sample information

Material Identification: Ink black/Ink
Testing Period: 05/May/2008 – 26/May/2008

2.) Applied analytical techniques

Sample preparation: Pulverization/Homogenization of the sample material

Chromium, Lead, Cadmium: Inductively coupled plasma atomic emission spectrometry acc. EN ISO 11885 after microwave digestion with nitric acid/hydrogen peroxide based on EPA 3051 A

Mercury: Cold vapor atomic absorption spectrometry acc. DIN EN 1483 after microwave digestion with nitric acid/hydrogen peroxide based on EPA 3051 A

Chromium, hexavalent : Ion chromatography after dilution with water (remark: Photometric determination not possible due to coloured sample matrix)

PBDE/PBB: High resolution gas chromatography with mass-selective detector after soxhlet extraction with toluene based EPA 3540C

3.) Analytical results

Parameter		Value	Limit according Directive 2005/618/EC	Comment
Cadmium (Cd)	mg/kg	< 1	100	
Lead (Pb)	mg/kg	< 10	1000	
Mercury (Hg)	mg/kg	< 0.5	1000	
Chromium, total (Cr)	mg/kg	3760	1000	
Chromium, hexavalent (Cr(VI)) ²	mg/kg	<10		Hexavalent chromium, Cr (VI)
Bromine (Br)	mg/kg	n.a. ³	-	
PBDEs	Monobromo diphenyl ether	mg/kg	< 5	Sum of polybrominated diphenyl ethers
	Dibromo diphenyl ether	mg/kg	< 5	
	Tribromo diphenyl ether	mg/kg	< 5	
	Tetrabromo diphenyl ether	mg/kg	< 5	
	Pentabromo diphenyl ether	mg/kg	< 10	
	Hexabromo diphenyl ether	mg/kg	< 10	
	Heptabromo diphenyl ether	mg/kg	< 10	
	Octabromo diphenyl ether	mg/kg	< 20	
	Nonabromo diphenyl ether	mg/kg	< 30	
	Decabromo diphenyl ether	mg/kg	< 50	
PBBs	Monobromo biphenyl	mg/kg	< 5	Sum of polybrominated biphenyls
	Dibromo biphenyl	mg/kg	< 5	
	Tribromo biphenyl	mg/kg	< 5	
	Tetrabromo biphenyl	mg/kg	< 5	
	Pentabromo biphenyl	mg/kg	< 10	
	Hexabromo biphenyl	mg/kg	< 10	
	Heptabromo biphenyl	mg/kg	< 10	
	Octabromo biphenyl	mg/kg	< 20	
	Nonabromo biphenyl	mg/kg	< 30	
	Decabromo biphenyl	mg/kg	< 50	

Revision: A

² Extractable fraction; ³ n.a. = not analysed

Compliance List:

RoHS Directive 2002/95/EC
WEEE Directive 2002/96/EC
ELV Directive 2000/53/EC

Based on the performed tests on the submitted sample, the results **indicate no conflict** with the above directives and its subsequent amendments.



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