

## Test Report

No. 3751551-01

Date : 30/MAY/2016

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Jauch Quartz GmbH  
Mr. Stefan Durczok  
In der Lache 24  
78056 VS-Schwenningen  
GERMANY



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

SGS Job file : 3751551  
Order date : 06/MAY/2016  
Order number : -  
Sample receiving Date : 11/MAY/2016  
Testing period : 11/MAY/2016 - 30/MAY/2016

Sample No	Sample designation
160480370	MQ5 (UM-5)

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 Cr(VI) 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 **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 / hi-cg  
Projektleiterin / Project Manager

i.A.

Dr. Nadine Meichsner  
Projektleiterin / Project Manager

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SGS INSTITUT FRESENIUS GmbH | Im Maisel 14 D-65232 Taunusstein t +49 6128 744 - 0 f +49 6128 744 - 130 www.institut-fresenius.sgsgroup.de

Member of the SGS Group (Société Générale de Surveillance)

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, Aufsichtsratsvorsitzender: Dirk Hellemans, Sitz der Gesellschaft: Taunusstein, HRB 21543 Amtsgericht Wiesbaden

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

Sample No.		160480370			
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	
<b>Sum of PBDEs</b>	(6)	-	-	1000 (Sum of polybrominated diphenyl ether)	
Monobromodiphenyl ether		n.a.	50		
Dibromodiphenyl ether		n.a.	50		
Tribromodiphenyl ether		n.a.	50		
Tetrabromodiphenyl ether		n.a.	50		
Pentabromodiphenyl ether		n.a.	50		
Hexabromodiphenyl ether		n.a.	50		
Heptabromodiphenyl ether		n.a.	50		
Octabromodiphenyl ether		n.a.	50		
Nonabromodiphenyl ether		n.a.	50		
Decabromodiphenyl ether		n.a.	50		
<b>Sum of PBBs</b>		-	-		1000 (Sum of polybrominated biphenyls)
Monobromobiphenyl		n.a.	50		
Dibromobiphenyl	n.a.	50			
Tribromobiphenyl	n.a.	50			
Tetrabromobiphenyl	n.a.	50			
Hexabromobiphenyl	n.a.	50			
Pentabromobiphenyl	n.a.	50			
Heptabromobiphenyl	n.a.	50			
Octabromobiphenyl	n.a.	50			
Nonabromobiphenyl	n.a.	50			
Decabromobiphenyl	n.a.	50			

Note : mg/kg = ppm

n.d.= not Detected

RL = Report Limit

n.a.= not analyzed

\*\*= elevated reporting limit due to matrix interferences

# Test Report

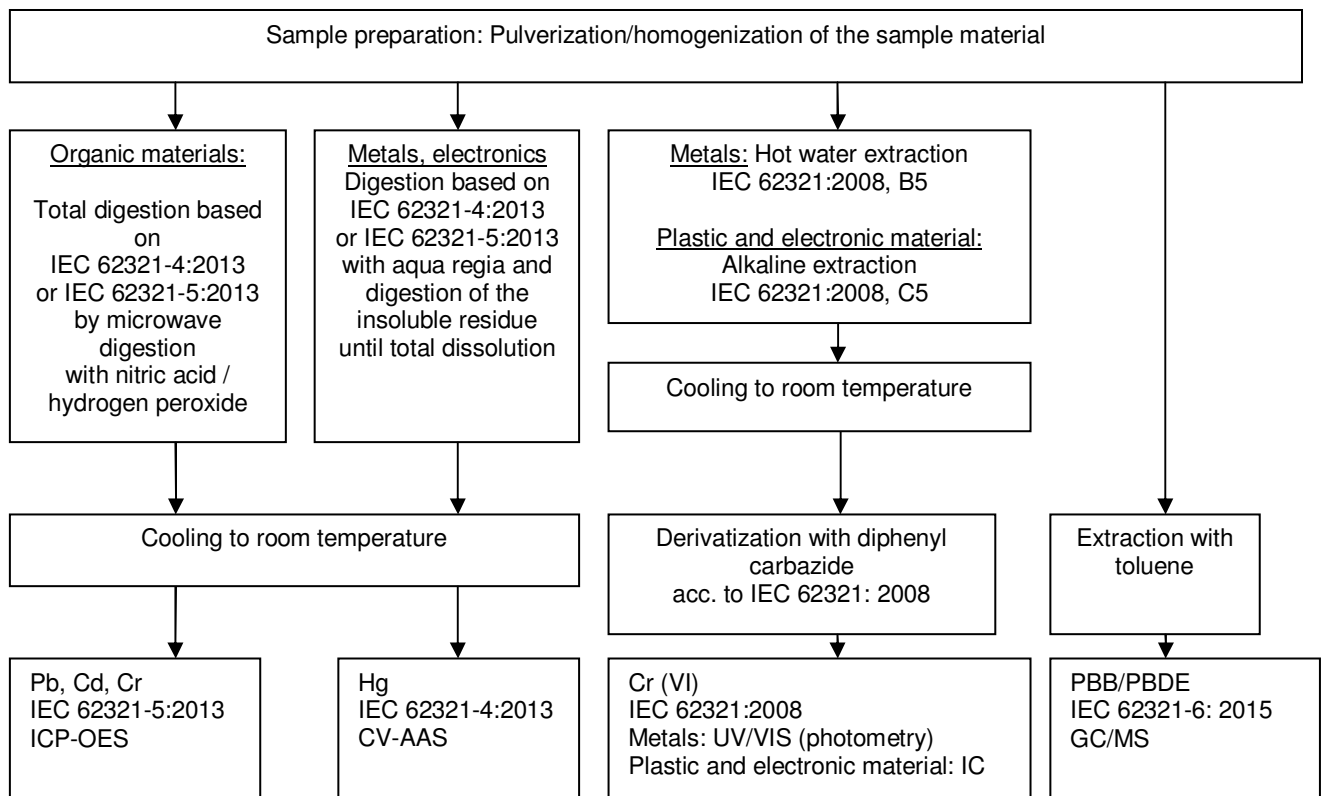
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## Flow Chart for the working flow of the performed analysis



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### Sample Photo(s)



\*\*\*End of Report\*\*\*