

No. NGBEC1701638901

Date: 03 May 2017

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WENZHOU YUNHE ELECTRIC CO.,LTD QILIGANG INDUSTRY ZONE,YUEQING,WENZHOU,ZHEJIANG

The following sample(s) was/were submitted and identified on behalf of the clients as : Cable Gland

SGS Job No. :	NP17-001507 - NB
Date of Sample Received :	20 Apr 2017
Testing Period :	20 Apr 2017 - 26 Apr 2017
Test Requested :	Selected test(s) as requested by client.
Test Method :	Please refer to next page(s).
Test Results :	Please refer to next page(s).
Conclusion :	Based on the performed tests on selected part of submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP), and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of SGS-CSTC Standards Technical Services Co., Ltd. Ningbo Branch

Niao

Iris Xiao Approved Signatory



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID Description	
SN1	NGB17-016389.001	Gray plastic
SN2	NGB17-016389.002	Black rubber

#### Remarks :

- (1) 1 mg/kg = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected ( < MDL )
- (4) "-" = Not Regulated

#### RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method : (1) With reference to IEC 62321-5:2013, determination of Cadmium by ICP-OES.

- (2) With reference to IEC 62321-5:2013, determination of Lead by ICP-OES.
- (3) With reference to IEC 62321-4:2013, determination of Mercury by ICP-OES.

(4) With reference to IEC 62321-7-2:2017, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis and/or with reference to IEC 62321-5:2013, determination of Chromium by ICP-OES.

- (5) With reference to IEC 62321-6:2015, determination of PBBs and PBDEs by GC-MS.
- (6) With reference to IEC 62321-8:2017, determination of phthalates by GC-MS.

<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	<u>MDL</u>	<u>001</u>	<u>002</u>
Cadmium (Cd)	100	mg/kg	2	ND	ND
Lead (Pb)	1000	mg/kg	2	ND	51
Mercury (Hg)	1000	mg/kg	2	ND	ND
Hexavalent Chromium (Cr(VI))	1000	mg/kg	8	ND	ND
Sum of PBBs	1000	mg/kg	-	ND	ND
Monobromobiphenyl	-	mg/kg	5	ND	ND
Dibromobiphenyl	-	mg/kg	5	ND	ND
Tribromobiphenyl	-	mg/kg	5	ND	ND
Tetrabromobiphenyl	-	mg/kg	5	ND	ND
Pentabromobiphenyl	-	mg/kg	5	ND	ND
Hexabromobiphenyl	-	mg/kg	5	ND	ND
Heptabromobiphenyl	-	mg/kg	5	ND	ND
Octabromobiphenyl	-	mg/kg	5	ND	ND
Nonabromobiphenyl	-	mg/kg	5	ND	ND
Decabromobiphenyl	-	mg/kg	5	ND	ND
Sum of PBDEs	1000	mg/kg	-	ND	ND



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Test Report	No. NGBEC1701638	901	Date:	03 May 20	17	Page 3 of 6
<u>Test Item(s)</u>	<u>Limit</u>	<u>Unit</u>	MDL	<u>001</u>	<u>002</u>	
Monobromodiphenyl ether	-	mg/kg	5	ND	ND	
Dibromodiphenyl ether	-	mg/kg	5	ND	ND	
Tribromodiphenyl ether	-	mg/kg	5	ND	ND	
Tetrabromodiphenyl ether	-	mg/kg	5	ND	ND	
Pentabromodiphenyl ether	-	mg/kg	5	ND	ND	
Hexabromodiphenyl ether	-	mg/kg	5	ND	ND	
Heptabromodiphenyl ether	-	mg/kg	5	ND	ND	
Octabromodiphenyl ether	-	mg/kg	5	ND	ND	
Nonabromodiphenyl ether	-	mg/kg	5	ND	ND	
Decabromodiphenyl ether	-	mg/kg	5	ND	ND	
Di-butyl Phthalate (DBP)	1000	mg/kg	50	ND	ND	
Benzyl Butyl Phthalate (BBP)	1000	mg/kg	50	ND	ND	
Bis(2-ethylhexyl) Phthalate(DEHP)	1000	mg/kg	50	ND	ND	
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND	ND	

Notes :

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.

IEC 62321 series is equivalent to EN 62321 series

http://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101::::FSP\_ORG\_ID,FSP\_LANG\_ID:125863 7,25

(2) The result of Hexavalent Chromium (Cr(VI)) is "ND" as the result of Chromium (Cr) is "ND", and confirmation test of Hexavalent Chromium (Cr(VI)) is not required.

(3) If the Chromium (Cr) content is greater than the MDL of Hexavalent Chromium (Cr(VI)). And confirmation test of Hexavalent Chromium (Cr(VI)) is required.



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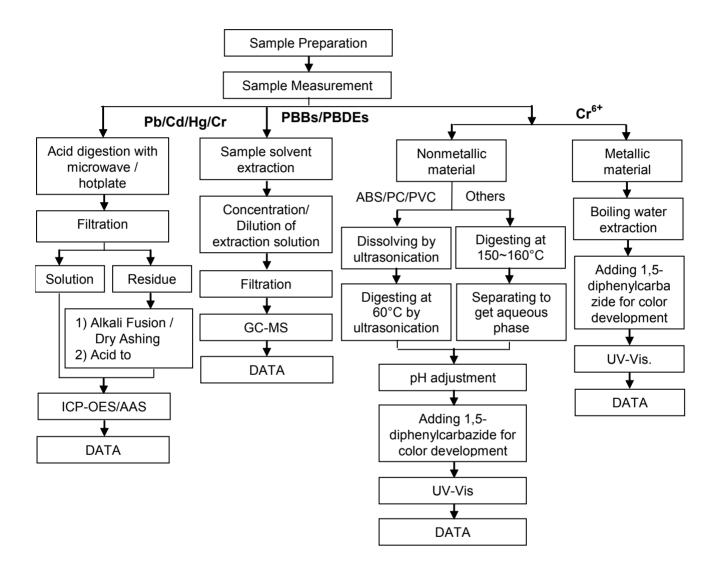
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#### ATTACHMENTS

## **RoHS Testing Flow Chart**

1) These samples were dissolved totally by pre-conditioning method according to below flow chart.  $(Cr^{6+} and PBBs/PBDEs test method excluded)$ 





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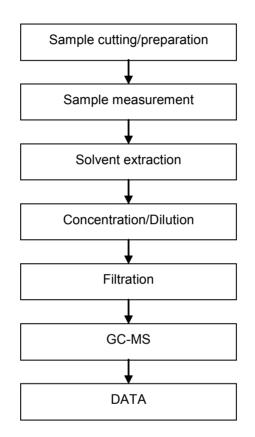
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### **Phthalates Testing Flow Chart**





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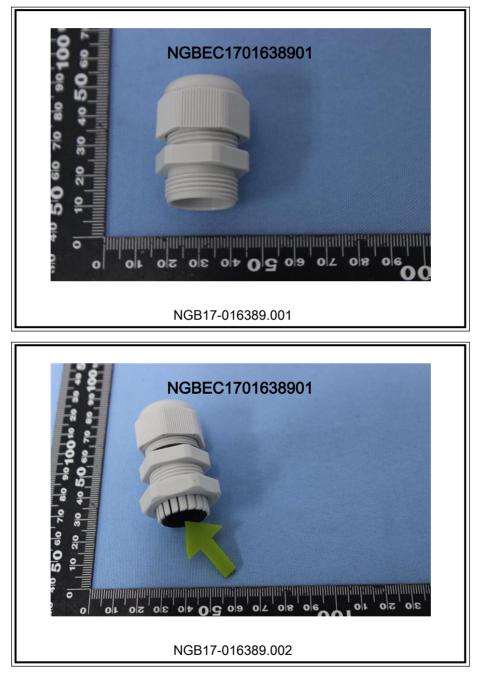
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