

# TEST REPORT

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Applicant:

ZHEJIANG GEYA ELECTRICAL CO., LTD.

WENZHOU BRIDGE INDUSTRIAL ZONE, BEIBAIXIANG TOWN, YUEQING, ZHEJIANG, 325603 - CHINA

Date of Submission: 2024-10-24

Test Period: 2024-10-24 to 2024-11-1 Sample Mode: Sample Presentation BV EE Ref. No.: GYB-ESH-Q24102301-A0

Sample Description:	Sample(s) received is(are) stated to be: Switch-disconnector					
Manufacturer:	/	Buyer:	/			
Style No(s):	GYH8 series	PO No.:	/			
Country of Origin:	/	Country of Destination:	Oversea Country			

### SUMMARY OF TEST RESULTS

TEST REQUESTED		CONCLUSION
Compliance Test - European Parliament and Counci	l Directive 2011/65/EU on the Restriction of the	
Use of Certain Hazardous Substances in Electrical a	nd Electronic Equipment (RoHS) with \$1800UC78	PASS
Amendments (EU) 2015/863	SCUMET IN STATE OF	N/C
Note: Testing as sample submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client, this test representative and authenticity of the submitted by client.	port is only responsible for the conformity of the texted items. It	clienus responsible
REMARK		冠星
If there are questions or concerns on this report, please contact the following	ng persons:  Mr. Speed Yu/Ms. Cabell Chen	\$ 6
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	BUREAU VERITAS CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)	
	Laboratory Test Location: No.368,Guangzhong Road, Zhuanqiao Town, Minhang, Shanghai No.168,Guanghua Road, Zhuanqiao Town, Minhang, Shanghai	
PREPARED BY: Ainnie Zhang	APPROVED BY:  Lynd Lv  Technical Specialist	_



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Tel: 86-21-24166888 Fax: 86-21-64890042 Email: bvcps\_sh\_info@cn.bureauveritas.com Http: www. bureauveritas.com/cps This report is governed by, and incorporates by reference, the Conditions of Testing as posted at the date of issuance of this report at <a href="http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/">http://www.bureauveritas.com/home/about-us/our-business/cps/about-us/terms-conditions/</a> and is intended for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. Measurement uncertainty is only provided upon request for accredited tests. Statements of conformity are based on simple acceptance criteria without taking measurement uncertainty into account, unless otherwise requested in writing. You have 60 days from date of issuance of this report to notify us of any material error or mission caused by our negligence or if you require measurement uncertainty; provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute you unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents.



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## **Photo of the Submitted Sample**





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### **TEST RESULT**

Compliance Test - European Parliament and Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) with its Amendments (EU) 2015/863

Test Method : See Appendix.

### See Analytes and their corresponding Maximum Allowable Limit in Appendix

	-		Result									
	Parameter		Lead (Pb)	Cadmium (Cd)	Mercury (Hg)	Chromium VI (Cr VI)	PBBs & PBDEs	DBP	BBP	DEHP	DIBP	Conclusion
Unit			mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	-
Test Item	Description	Location	-	-	-	-	-	-	-	-	-	-
1	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
2	Grey plastic		ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
3	Grey plastic	Housing	ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
4	Beige plastic	]	ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
5	Grey plastic		ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
6	Silvery metal spring		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
7	Silvery metal screw		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
8	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
9	Coppery metal contact point with silvery plating		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
10	Coppery metal with silvery plating	Inside	ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
11	Silvery metal spring		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
12	Silvery metal		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
13	Silvery metal		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
14	Silvery metal spring		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
15	Purple plastic		ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
16	Coppery metal wire		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS

### Note / Key:

 $ND = Not \ detected$  ">" = Greater than "<" = Less than NR = Not requested mg/kg = milligram(s) per kilogram = ppm = part(s) per million Detection Limit: See Appendix. NA = Not applicable EX= Exempted

### Remark:

- The testing approach is listed in table of Appendix.
- \* denotes as reported result(s) was (were) performed by wet chemistry method. Others were screened by XRF. For XRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as total bromine. Also, the XRF 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.
- Only selected example(s) is (are) indicated on the photograph(s) in Comment.
- According to European Parliament and Council Directive 2011/65/EU, Article 5 "Adaptation of the Annexes to scientific and technical progress", exemption(s) should be granted to the materials and components of Test Item(s) in the lists in Annexes III and IV of this directive.



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### Comment:

# Photograph depicting Test Item(s)



**END** 



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### **APPENDIX**

			Detection L				
No.	Name of Analyte(s)	X-ra	y fluorescence (X	RF) <sup>[a]</sup>		Maximum Allowable Limit (mg/kg)	
110.	rume of rumiye(s)		Wet Chemistry	Waamum Anowable Ellint (Ing/kg)			
1	Lead (Pb)	100	200	200	10 <sup>[b]</sup>	1000	
2	Cadmium (Cd)	50	50	50	10 <sup>[b]</sup>	100	
3	Mercury (Hg)	100	200	200	10 <sup>[c]</sup>	1000	
4	Chromium (Cr)	100	200	200	NA	NA	
5	Chromium VI (Cr VI)	NA	NA	NA	3 <sup>[g, h]</sup> / 10 <sup>[d]</sup> / See <sup>[e, i]</sup>	1000 / Negative <sup>[i]</sup>	
6	Bromine (Br)	200	NA	200	NA	NA	
7	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeyaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (NonaBB)	NA	NA	NA	Each 50 <sup>[f]</sup>	Sum 1000	
8	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)	NA	NA	NA	Each 50 <sup>[f]</sup>	Sum 1000	
9	Dibutyl phthalate (DBP) Butyl benzyl phthalate (BBP) Di-2-ethylhexyl phthalate (DEHP)	NA	NA	NA	Each 500 <sup>[j]</sup>	Each 1000	

- NA = Not applicable IEC = International Electrotechnical Commission
- [a] Test method with reference to International Standard IEC 62321-3-1: 2013.
- Test method with reference to International Standard IEC 62321-5: 2013.
- $\begin{tabular}{ll} \hline \end{tabular} Test method with reference to International Standard IEC 62321-4: 2013+AMD1: 2017. \\ \hline \end{tabular}$
- Polymers and Electronics Test method with reference to International Standard IEC 62321-7-2: 2017.
- [e] Metal Test method with reference to International Standard IEC 62321-7-1: 2015.
- Test method with reference to International Standard IEC 62321-6: 2015.
- [g] Leather Test method International Standard ISO 17075: 2017.

Diisobutyl phthalate (DIBP)

- Other Than Metal, Leather, Polymers and Electronics Test method with reference to International Standard ISO 17075: 2017.
- Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Parliament and Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Parliament and Council Directive 2011/65/EU, Article 4(1).
- Test method with reference to International Standard IEC 62321-8: 2017

### $Testing\ Approach\ [\ Compliance\ Test\ for\ European\ Parliament\ and\ Council\ Directive\ 2011/65/EU\ ]:$

The testing approach was with reference to the following document(s).

- 1 International Standards IEC 62321-1: 2013 and IEC 62321-2: 2021
- 2 "RoHS Enforcement Guidance Document Version 1" by EU RoHS Enforcement Authorities Informal Network. (May 2006)
- 3 "RoHS Regulations Government Guidance Notes" by United Kingdom Department for Business Innovation & Skills. (February 2011)
- "Final Report to RoHS substances (Hg, Pb, Cr(VI), Cd, PBB and PBDE) in electrical and electronic equipment in Belgium" by Belgium Federal Public Service Health, Food Chain Safety and Environment. (November 2005)