TEST REPORT

LAB NO. : (6624)298-0611
DATE : November 1, 2024

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-Q24102307-A0

Sample Description:	Sample(s) received is(are) stated to be: MCCB		
Manufacturer:	/	Buyer:	/
Style No(s):	GYM9H-125 series	PO No.:	/
Country of Origin:	/	Country of Destination:	Oversea Country

SUMMARY OF TEST RESULTS

TEST REQUESTED	CONCLUSION
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	PASS

Note: Testing as sample submitted by client, this test report is only responsible for the conformity of the tested items. The client is responsible for the representative and authenticity of the submitted samples.

REMARK
If there are questions or concerns on this report, please contact the following persons:

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BUREAU VERITAS
CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)
Laboratory Test Location:
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PREPARED BY: Ainnie Zhang

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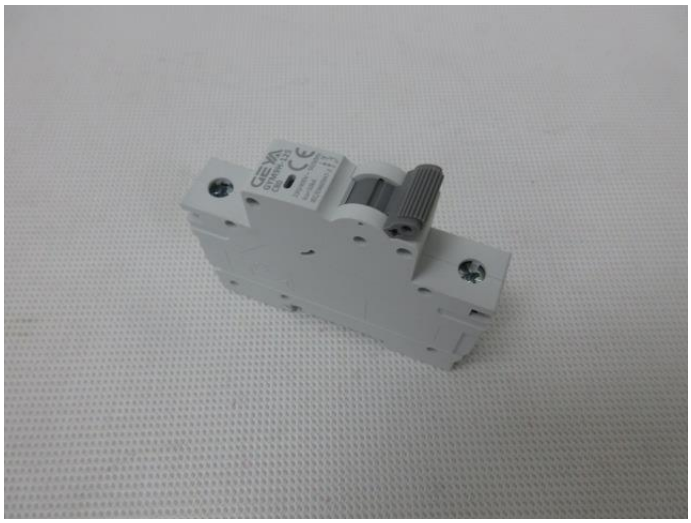
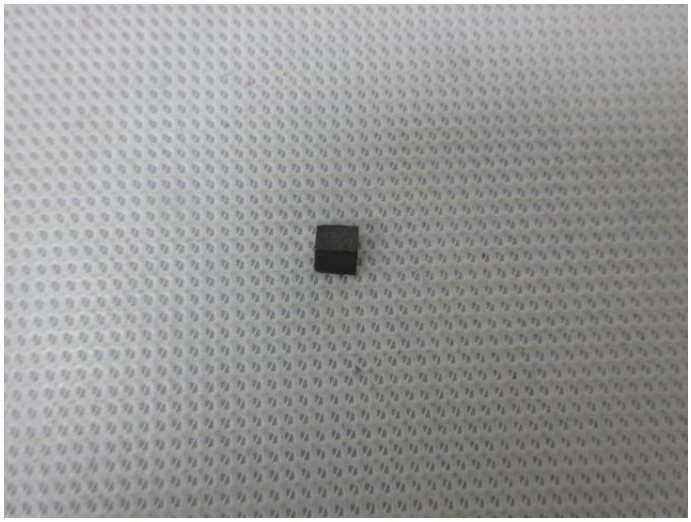
Photo of the Submitted Sample





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	Housing	ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
2	Grey plastic		ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
3	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
4	Grey 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	Red plastic	Inside	ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
7	Beige plastic		ND	ND	ND	ND	ND*	ND*	ND*	ND*	ND*	PASS
8	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
9	Silvery metal screw		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
10	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
11	White plastic		ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
12	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
13	Coppery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
14	Red plastic		ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
15	Silvery metal spring		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
16	Brown plastic		ND	ND	ND	ND	ND*	ND*	ND*	ND*	ND*	PASS
17	Silvery metal		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
18	Silvery metal spring		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
19	Silvery metal screw with black plating		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
20	Golden metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
21	Silvery metal		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
22	Silvery metal		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
23	Silvery metal		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
24	Golden metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
25	Silvery metal spring		ND	ND	ND	Negative*	NA	NA	NA	NA	NA	PASS
26	Coppery metal contact point with silvery plating		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
27	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
28	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
29	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
30	Coppery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
31	Coppery metal contact point with silvery plating		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS

-			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	-	-	-	-	-	-	-	-	-	-
32	Coppery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
33	White plastic	Inside	ND	ND	ND	ND	ND	ND*	ND*	ND*	ND*	PASS
34	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
35	Silvery metal spring		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
36	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
37	Silvery metal		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS
38	Black metal magnet		ND	ND	ND	ND	NA	NA	NA	NA	NA	PASS

Note / Key :

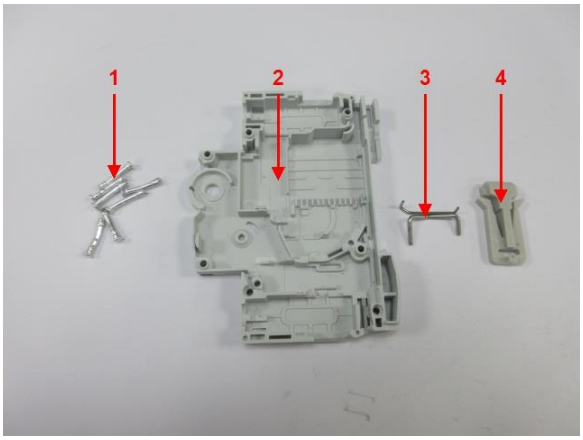
ND = Not detected ">" = Greater than "<" = Less than
NR = Not requested mg/kg = milligram(s) per kilogram = ppm = part(s) per million
Detection Limit: See Appendix. NA = Not applicable EX= Exempted

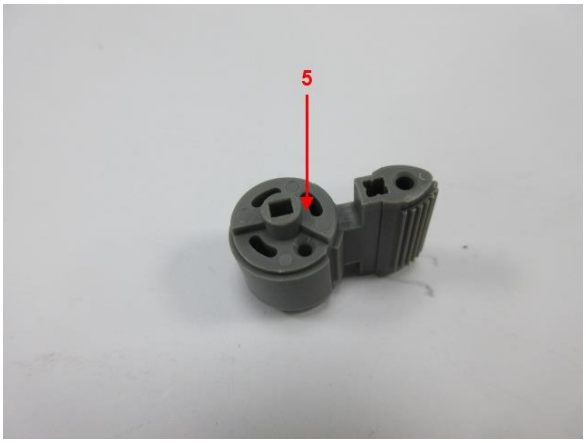
Remark :

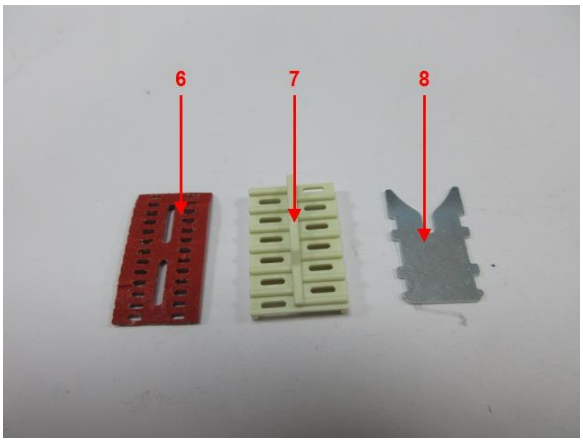
- The testing approach is listed in table of Appendix.
- * denotes as reported result(s) was (were) performed by wet chemistry method. Others were screened by XRF. For XRF screening, the result(s) of Cr VI was (were) reported as total chromium and the result(s) of PBBs and PBDEs was (were) reported as 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.

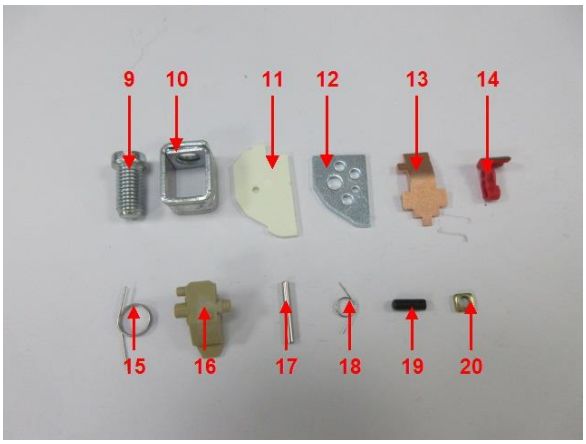
Comment :

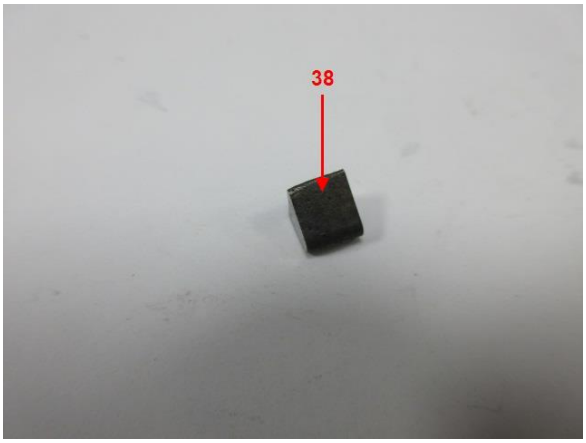
Photograph depicting Test Item(s)











END

APPENDIX

List of Analytes and their Corresponding Test Methods, Detection Limit and Maximum Allowable Limit [Compliance Test for European Parliament and Council Directive 2011/65/EU with its Amendments (EU) 2015/863] :

No.	Name of Analyte(s)	Detection Limit (mg/kg)				Maximum Allowable Limit (mg/kg)
		X-ray fluorescence (XRF)[a]			Wet Chemistry	
		Plastic	Metallic / glass / ceramic	Others		
1	Lead (Pb)	100	200	200	10[b]	1000
2	Cadmium (Cd)	50	50	50	10[b]	100
3	Mercury (Hg)	100	200	200	10[c]	1000
4	Chromium (Cr)	100	200	200	NA	NA
5	Chromium VI (Cr VI)	NA	NA	NA	3[g, h] / 10[d] / See [e, i]	1000 / Negative[i]
6	Bromine (Br)	200	NA	200	NA	NA
7	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	NA	NA	NA	Each 50[f]	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[f]	Sum 1000
9	Dibutyl phthalate (DBP) Butyl benzyl phthalate (BBP) Di-2-ethylhexyl phthalate (DEHP) Diisobutyl phthalate (DIBP)	NA	NA	NA	Each 500[j]	Each 1000

NA = Not applicable IEC = International Electrotechnical Commission

[a] Test method with reference to International Standard IEC 62321-3-1: 2013.

[b] Test method with reference to International Standard IEC 62321-5: 2013.

[c] Test method with reference to International Standard IEC 62321-4: 2013+AMD1: 2017.

[d] 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.

[f] Test method with reference to International Standard IEC 62321-6: 2015.

[g] Leather - Test method International Standard ISO 17075: 2017.

[h] Other Than Metal, Leather, Polymers and Electronics - Test method with reference to International Standard ISO 17075: 2017.

[i] 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).

[j] 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)

4 “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)

Annex

The client declared that the materials used of below Styles are same as tested style.

GYM9H-125DC

Remark:
Since the client was not able to provide the sample of additional Style, above additional Style(s) hasn't been tested, but only based on the guarantee letter provided by the client. Bureau Veritas-CPS takes no responsibility for any mistakes and the problems of product consistency caused by inaccurate and/or invalid information submitted by the client. The client will take the responsibility of all discrepancy and risk.