RoHS TEST REPORT

Test Report No.: SP1001GZ2404705

Proximity switch

Yueqing Binxuan Electric Co., Ltd

Qitou Yi Village, Liushi Town, Yueqing City, Wenzhou City, Zhejiang Province

Date of Report: April 24,2024

Sapo Certification & Testing Laboratory Limited

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Test Report

NO.: SP1001GZ2404705 **Date: April 24,2024** **Page 1 of 8**

Client: **Yueqing Binxuan Electric Co., Ltd**

Address: **Qitou Yi Village, Liushi Town, Yueqing City, Wenzhou City, Zhejiang Province**

Test item(s): **Proximity switch**

Model: **BPR, BPG, BPZ, BPA, BPJ, BPY, BPQ, BPW, BPT, BPB, BPS, BPP, BPC, BPM, BPF, BPE, BPN, BPD, BPF, BPH, BPI, BPK, BPL, BPO, BPU, BPV, BPX, BPU1, BPE1, BPS1, BPB1, BPA1, BPZ1, BPZ2, BPR1, BPK1, BPF1, BPQ1, BPT18,BIL, BIM, BML, BMM, BXL, BXM, BYL, BYM, BCL, BCM, BTL, BTM, BKL, BKM, UBX**

Sample Receiving date: 2024-04-15

Testing Period: 2024-04-15 –2024-04-24

Test specification: **Test result:**

Overall results according to tests performed **PASS**

Based on the performed tests on submitted samples, the test results of Cadmium, Lead, Mercury, Cr(VI), PBBs, PBDEs, DBP, BBP, DEHP, DIBP comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for SAPO certification & testing laboratory limited

Authorized by: Randy Tan

April 24,2024 Chief Assessor

Confirmation Test by Wet Chemistry

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.

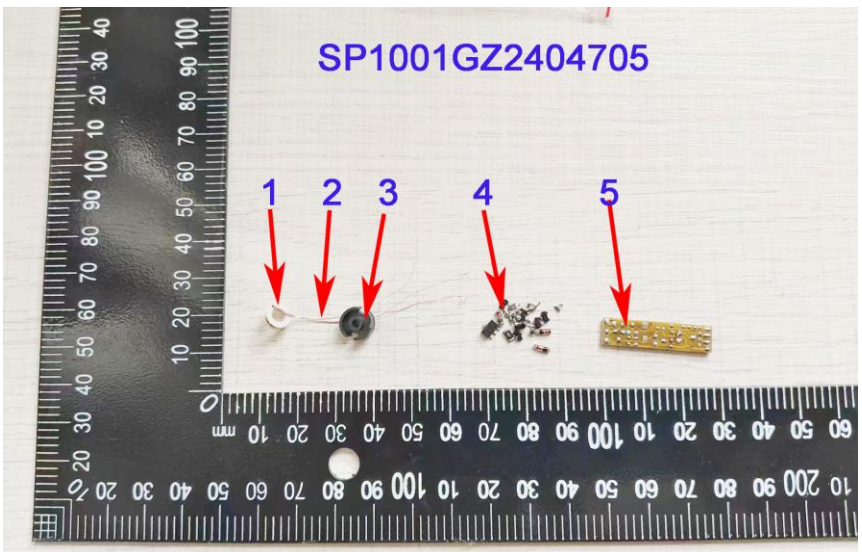
(4)With reference to IEC 62321:2013, determination of Hexavalent Chromium by Colorimetric Method using UV-Vis.

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

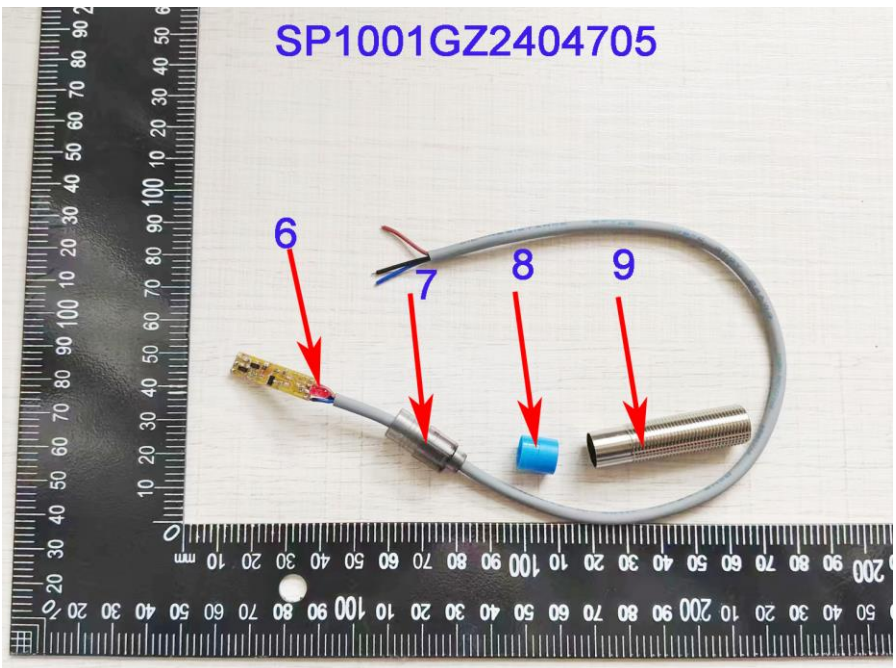
Test Part Description :

Specimen No.	Description
NO.01	Coil bracket 1 (White)
NO.02	Copper wire 1 (Yellow)
NO.03	Coil bracket 2 (White)
NO.04	SMT original (Assembly components)
NO.05	PCB (Yellow)
NO.06	LED (Red)
NO.07	Shell 1 (Grey)
NO.08	Shell 2 (Blue)
NO.09	Shell 3 (Silvery)
NO.10	Wire casing 1 (Grey)
NO.11	Wire casing 2 (Black)
NO.12	Wire casing 3 (Blue)
NO.13	Wire casing 4 (Brown)
NO.14	Copper wire 2 (Yellow)

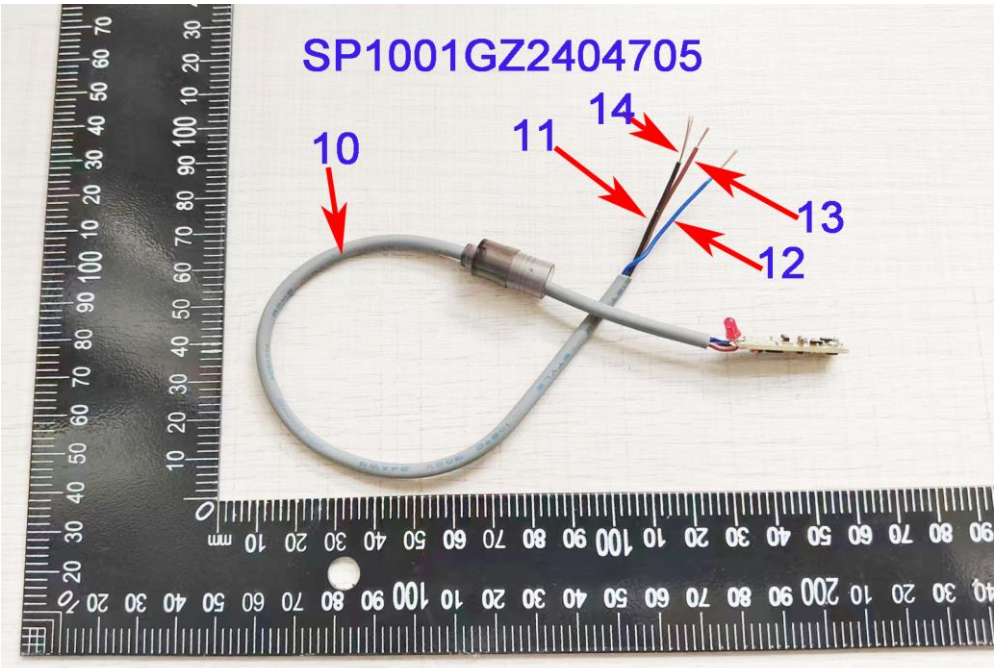
Sample Photo:



Material No.	Result (mg/kg)								
	Cd	Pb	Cr	Hg	Br	DBP	BBP	DEHP	DIBP
	Limit(mg/kg)								
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000	1000	1000	1000	1000
1(Plastic)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
2(Metal)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
3(Plastic)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
4(Combination)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
5(PCB)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.



Material No.	Result (mg/kg)								
	Cd	Pb	Cr	Hg	Br	DBP	BBP	DEHP	DIBP
	Limit(mg/kg)								
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000	1000	1000	1000	1000
6(Combination)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
7(Plastic)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
8(Plastic)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
9(Metal)	N.D.	18	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.



Material No.	Result (mg/kg)								
	Cd	Pb	Cr	Hg	Br	DBP	BBP	DEHP	DIBP
	Limit(mg/kg)								
	100	1000	Cr(VI): 1000	1000	PBB:1000 PBDE:1000	1000	1000	1000	1000
10(Rubber)	N.D.	21	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
11(Rubber)	N.D.	21	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
12(Rubber)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
13(Rubber)	N.D.	22	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.
14(Metal)	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.

Abbreviation:

Pb	denotes Lead
Cd	denotes Cadmium
Hg	denotes Mercury
Cr	denotes Chromium Cr(VI) denotes Chromium(VI)
PBBs	denotes Total Polybrominated Biphenyls
PBDEs	denotes Total Polybrominated Diphenyl Ethers
DBP	denotes Dibutyl phthalate
BBP	denotes Butyl benzyl phthalate
DEHP	denotes Bis(2-ethylhexyl) phthalate
DIBP	denotes Diisobutyl phthalate
N.D.	denotes Not Detected (< MDL) .
MDL	denotes Method Detection Limit
N.A.	denotes Not Applicable
^	The total Chromium have been determined

Remark:

6(c) denotes exemption applications 6(c) Copper alloy containing up to 4 % lead by weight.

(^2) The Chromium (VI) content in surface layer has been confirmed with reference to EN 62321 Annex.

(^3) The method detection limit for each individual PBBs and individual PBDEs, DBP, BBP, DEHP, DIBP

Method Detection Limit in ppm (mg/kg)		
PBBs	Monbromobiphenyl	5
	Dibromobiphenyl	5
	Tribromobiphenyl	5
	Tetrabromobiphenyl	5
	Pentabromobiphenyl	5
	Hexabromobiphenyl	5
	Heptabromobiphenly	5
	Octabromobiphenyl	5
	Nonabromobiphenyl	5
	Decabromobiphenyl	5
PBDEs	Monbromodiphenyl ether	5
	Dibromodiphenyl ether	5
	Tribromodiphenyl ether	5
	Tetrabromodiphenyl ether	5
	Pentabromodiphenyl ether	5
	Hexabromodiphenyl ether	5
	Heptabromodiphenyl ether	5
	Octabromodiphenyl ether	5
	Nonabromodiphenyl ether	5
	Decabromodiphenyl ether	5
DBP	Dibutyl phthalate	50
BBP	Butyl benzyl phthalate	50
DEHP	Bis(2-ethylhexyl) phthalate	50
DIBP	Diisobutyl phthalate	50

General remark：

1. The test is sub-contracted to a laboratory which complies with the requirement of ISO/IEC 17025:2017
2. Selected test(s) as requested by client

Sample Photo:

Complete Sample :



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