

Test Report

Report No.: GNB190711134EN

Date: Jul. 23, 2019

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The following information was/were submitted and identified by/on behalf of the client:


Applicant : ZHEJIANG HANER PLASTIC CO., LTD.
Address : No 187th, Weiwu Road, Yueqing Economic Development Zone,
Yueqing, Zhejiang, China
Sample Name : Waterproof Terminal Box
Sample Model : HR-RA, HR-RT, HR-KT, HR-GT, HR-NT, HR-HT, HR-HA
50×50、 80×50、 65×50×55、 85×85×50、 100×100×70、 110×80×45、
150×110×70、
150×150×70、 175×125×100、 200×100×70、 200×155×80、 200×200×80、
255×200×80、 255×200×120、 300×220×120、 300×250×120、 380×280×130、
400×350×120、
500×400×200、 600×400×220
Sample Receive Date : Jul. 11, 2019
Sample Testing Period : Jul. 11, 2019 - Jul. 15, 2019
Test Result Summary:

As requested by the applicant, for details refer to attached page(s).

TEST ITEM(S)	TEST REQUESTED	CONCLUSION(S)
Pb, Cd, Hg, CrVI, PBBs, PBDEs and Phthalates (DBP, BBP, DEHP, DIBP) content	RoHS Directive 2011/65/EU and its amendment (EU) 2015/863	PASS

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Authorized signature:



Lab Manager: Gavin Zhou



Jul. 23, 2019

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Test Result(s):
Test Sample Description:

Material No.	Material Description
<u>01</u>	White plastic box
<u>02</u>	Silvery metal screw

RoHS(Pb, Cd, Hg, CrVI, PBBs, PBDEs and Phthalates(DBP, BBP, DEHP, DIBP))

Test Method: Lead(Pb), Cadmium(Cd) –IEC 62321-5: 2013
 Mercury(Hg) –IEC 62321-4: 2013
 Chromium VI(CrVI): For Metal material –IEC 62321-7-1: 2015
 For Polymer or Electronic material –IEC 62321-7-2: 2017
 PBBs, PBDEs –IEC 62321-6: 2015
 DBP, BBP, DEHP, DIBP –IEC 62321-8: 2017

Test item	Limit	Unit	RL	Result(s)
				<u>02</u>
Lead(Pb)	1000	mg/kg	10	33
Cadmium(Cd)	100	mg/kg	10	N.D.
Mercury(Hg)	1000	mg/kg	10	N.D.
Chromium VI(CrVI)	--	µg/cm ²	0.10	N.D.
Conclusion(s)				PASS

Test item(s)	Limit	Unit	RL	Result(s)
				<u>01</u>
Lead(Pb)	1000	mg/kg	10	N.D.
Cadmium(Cd)	100	mg/kg	10	N.D.
Mercury(Hg)	1000	mg/kg	10	N.D.
Chromium VI(CrVI)	1000	mg/kg	50	N.D.
Dibutyl phthalate(DBP)	1000	mg/kg	50	N.D.
Butyl benzyl phthalate(BBP)	1000	mg/kg	50	N.D.
Di-2-ethylhexyl phthalate(DEHP)	1000	mg/kg	50	N.D.
Di-iso-butyl phthalate(DIBP)	1000	mg/kg	50	N.D.
Monobromobiphenyls	--	mg/kg	5	N.D.
Dibromobiphenyls	--	mg/kg	5	N.D.
Tribromobiphenyls	--	mg/kg	5	N.D.
Tetrabromobiphenyls	--	mg/kg	5	N.D.

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Test item(s)	Limit	Unit	RL	Result(s)
				01
Pentabromobiphenyls	--	mg/kg	5	N.D.
Hexabromobiphenyls	--	mg/kg	5	N.D.
Heptabromobiphenyls	--	mg/kg	5	N.D.
Octabromobiphenyls	--	mg/kg	5	N.D.
Nonabromobiphenyls	--	mg/kg	5	N.D.
Decabromobiphenyl	--	mg/kg	5	N.D.
Group PBBs	1000	mg/kg	--	N.D.
Monobromodiphenyl ethers	--	mg/kg	5	N.D.
Dibromodiphenyl ethers	--	mg/kg	5	N.D.
Tribromodiphenyl ethers	--	mg/kg	5	N.D.
Tetrabromodiphenyl ethers	--	mg/kg	5	N.D.
Pentabromodiphenyl ethers	--	mg/kg	5	N.D.
Hexabromodiphenyl ethers	--	mg/kg	5	N.D.
Heptabromodiphenyl ethers	--	mg/kg	5	N.D.
Octabromodiphenyl ethers	--	mg/kg	5	N.D.
Nonabromodiphenyl ethers	--	mg/kg	5	N.D.
Decabromodiphenyl ether	--	mg/kg	5	N.D.
Group PBDEs	1000	mg/kg	--	N.D.
Conclusion(s)				PASS

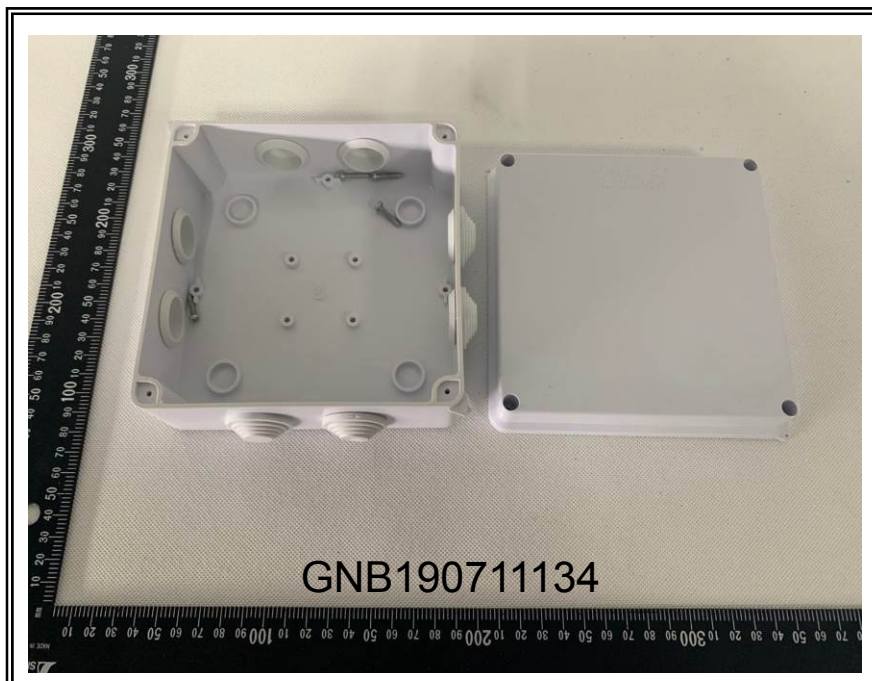
- Notes:**
1. 1000mg/kg = 0.1%;
 2. RL = Reporting Limit;
 3. N.D. = Not detected (<RL);
 4. According to IEC 62321-7-1: 2015, explanation of result on Cr(VI) for metal sample see below table.

Colorimetric result (Cr(VI) concentration)	Qualitative result
The sample solution is < the 0.10 ug/cm ² equivalent comparison standard solution	The sample is negative for Cr(VI) – The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating.
The sample solution is ≥ the 0.10 ug/cm ² and ≤ the 0.13 ug/cm ² equivalent comparison standard solutions	The result is considered to be inconclusive – Unavoidable coating variations may influence the determination. Recommendation: if additional samples are available, perform a total of 3 trials to increase sampling surface area. Use the averaged result of the 3 trials for the final determination.
The sample solution is > the 0.13 ug/cm ² equivalent comparison standard solution	The sample is positive for Cr(VI) – The Cr(VI) concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

Negative = Absence of Cr(VI), Inconclusive = Maybe exist Cr(VI), Positive = Presence of Cr(VI).

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Sample Photo(s):



GIG authenticate the photo(s) on original report only

End of Report

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