

TEST REPORT

NINGBO LANGCHI NEW MATERIALS TECHNALOGY CO.,LTD.

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NINGBO LANGCHI NEW MATERIALS TECHNALOGY CO.,LTD. 59 LIXIN ROAD, ZONGHAN STREET CIXI NINGBO ZHEJIANG CHINA

SAMPLE INFORMATION:

Sample Description:	PNEUMATIC TUBING	Sample Quantity:	N/A
Vendor:	N/A	Style No(s):	PUR SERIES, PU SERIES, PA6 SERIES, PA11 SERIES, PA12 SERIES, PE SERIES, PVC SERIES, PFA SERIES, FEP SERIES, TPV SERIES, PTFE SERIES, PVDF SERIES, SILICONE SERIES
Manufacturer:	NINGBO LANGCHI NEW MATERIALS TECHNALOGY CO.,LTD./59 LIXIN ROAD, ZONGHAN STREET CIXI NINGBO ZHEJIANG CHINA	SKN/SKU No.:	N/A
Buyer:	N/A	PO No.:	N/A
Labeled Age Grade:	N/A	Ref #:	N/A
Appropriate Age Grade:	N/A	Country of Origin:	CHINA
Client Specified Age Grade:	N/A	Assortment No.:	N/A
Tested Age Grade:	N/A	Country of Destination:	N/A
UPC Code:	N/A	Color:	N/A

EXECUTIVE SUMMARY:

TEST REQUESTED	CONCLUSION
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



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Bureau Veritas Testing Technical Service (Zhejiang) Co., Ltd

Kobe Chen

Chemical Supervisor



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Tested Component(s) Breakdown List

Test Item	Description	Location	Style
1	White plastic	Pa11	10-
2	Blue transparent plastic	PTFE	
3	Blue transparent plastic	PFA	-
4	Transparent soft plastic	PVC	(-
5	Translucent plastic	Pa6	-
6	Transparent soft plastic	PUR	10=
7	Blue plastic	PU) -
8	Translucent plastic	PE	
9	White plastic	Pa12	1-7
10	Transparent plastic	FEP), V
11	White plastic	PVDF	18
12	Red plastic	TPV	12
13	Transparent soft plastic	Silicone	F (12)

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.

-	Unit	MDL	Maximum Allowable Limit (Req.)	K-X	Re	sult	XX
Test Item	-			1	2	3	4
Parameter	- 1	-		=	-		4-
Lead (Pb)	mg/kg	2	1000	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	2	100	ND	ND	ND	ND
Mercury (Hg)	mg/kg	2	1000	ND	ND	ND	ND
Chromium VI (Cr VI)	mg/kg	2	1000	ND	ND	ND	ND
MonoBB	mg/kg	5		ND	ND	ND	ND
DiBB	mg/kg	5		ND	ND	ND	ND
TriBB	mg/kg	5		ND	ND	ND	ND
TetraBB	mg/kg	5] \ [ND	ND	ND	ND
PentaBB	mg/kg	5] \ [ND	ND	ND	ND
HexaBB	mg/kg	5		ND	ND	ND	ND
HeptaBB	mg/kg	5		ND	ND	ND	ND
OctaBB	mg/kg	5		ND	ND	ND	ND
NonaBB	mg/kg	5		ND	ND	ND	ND
DecaBB	mg/kg	5		ND	ND	ND	ND
Sum of PBBs	mg/kg		1000	ND	ND	ND	ND
MonoBDE	mg/kg	5		ND	ND	ND _	ND
DiBDE	mg/kg	5		ND	ND	ND	ND
TriBDE	mg/kg	5		ND	ND	ND	ND
TetraBDE	mg/kg	5		ND	ND	ND	ND
PentaBDE	mg/kg	5		ND	ND	ND	ND
HexaBDE	mg/kg	5		ND	ND	ND	ND
HeptaBDE	mg/kg	5		ND	ND	ND	ND



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OctaBDE	mg/kg	5	1517	ND	ND	ND	ND
NonaBDE	mg/kg	5		ND	ND	ND	ND
DecaBDE	mg/kg	5		ND	ND	ND	ND
Sum of PBDEs	mg/kg	X	1000	ND	ND	ND	ND
Dibutyl phthalate (DBP)	mg/kg	50	1000	ND	ND	ND	ND
Butyl benzyl phthalate (BBP)	mg/kg	50	1000	ND	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	mg/kg	50	1000	ND	ND	ND	116
Diisobuty phthalate (DIBP)	mg/kg	50	1000	ND	ND	ND	ND
Conclusion	-		-	PASS	PASS	PASS	PASS

ZEKK)	Unit	MDL	Maximum Allowable Limit (Req.)		Re	sult	17
Test Item				5	6	7	8
Parameter	-		-	-	-		-
Lead (Pb)	mg/kg	2	1000	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	2	100	ND	ND	ND	ND
Mercury (Hg)	mg/kg	2	1000	ND	ND	ND	ND
Chromium VI (Cr VI)	mg/kg	2	1000	ND	ND	ND	ND
MonoBB	mg/kg	5		ND	ND	ND	ND
DiBB	mg/kg	5	1\	ND	ND	ND	ND
TriBB	mg/kg	5	1 \ 1	ND	ND	ND	ND
TetraBB	mg/kg	5	1 \ x	ND	ND	ND	ND
PentaBB	mg/kg	5		ND	ND	ND	ND
HexaBB	mg/kg	5		ND	ND	ND	ND
HeptaBB	mg/kg	5		ND	ND	ND	ND
OctaBB	mg/kg	5		ND	ND	ND	ND
NonaBB	mg/kg	5		ND	ND	ND	ND
DecaBB	mg/kg	5		ND	ND	ND	ND
Sum of PBBs	mg/kg	KEN	1000	ND	ND	ND	ND
MonoBDE	mg/kg	5		ND	ND	ND	ND
DiBDE	mg/kg	5	1\	ND	ND	ND	ND
TriBDE	mg/kg	5	1 \	ND	ND	ND	ND
TetraBDE	mg/kg	5	1 \ 1	ND	ND	ND	ND
PentaBDE	mg/kg	5		ND	ND	ND	ND
HexaBDE	mg/kg	5		ND	ND	ND	ND
HeptaBDE	mg/kg	5		ND	ND	ND	ND
OctaBDE	mg/kg	5		ND	ND	ND	ND
NonaBDE	mg/kg	5		ND	ND	ND	ND
DecaBDE	mg/kg	5		ND	ND	ND	ND
Sum of PBDEs	mg/kg	-	1000	ND	ND	ND	ND
Dibutyl phthalate (DBP)	mg/kg	50	1000	ND	ND	ND	ND
Butyl benzyl phthalate (BBP)	mg/kg	50	1000	ND	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	mg/kg	50	1000	ND	ND	ND	ND
Diisobuty phthalate (DIBP)	mg/kg	50	1000	ND	ND	ND	ND
Conclusion	-	_	-	PASS	PASS	PASS	PASS



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11-X-X	Unit	MDL	Maximum Allowable Limit (Req.)		Re	sult	Page 5 01
Test Item	-	- W	-	9	10	11	12
Parameter		ΔA: `	-	-		-	-
Lead (Pb)	mg/kg	2	1000	ND	ND	ND	ND
Cadmium (Cd)	mg/kg	2	100	ND	ND	ND	ND
Mercury (Hg)	mg/kg	2	1000	ND	ND	ND	ND
Chromium VI (Cr VI)	mg/kg	2	1000	ND	ND	ND	ND
MonoBB	mg/kg	5		ND	ND	ND	ND
DiBB	mg/kg	5	$\exists \setminus 1$	ND	ND	ND	ND
TriBB	mg/kg	5	$\neg \setminus x$	ND	ND	ND	ND
TetraBB	mg/kg	5		ND	ND	ND	ND
PentaBB	mg/kg	5		ND	ND	ND	ND
HexaBB	mg/kg	5	72	ND	ND	ND	ND
HeptaBB	mg/kg	5		ND	ND	ND	ND
OctaBB	mg/kg	5	\	ND	ND	ND	ND
NonaBB	mg/kg	5		ND	ND	ND	ND
DecaBB	mg/kg	5	7	ND	ND	ND	ND
Sum of PBBs	mg/kg		1000	ND	ND	ND	ND
MonoBDE	mg/kg	5		ND	ND	ND	ND
DiBDE	mg/kg	5	7\	ND	ND	ND	ND
TriBDE	mg/kg	5	 	ND	ND	ND	ND
TetraBDE	mg/kg	5	 	ND	ND	ND	ND
PentaBDE	mg/kg	5		ND	ND	ND	ND
HexaBDE	mg/kg	5	7 \X	ND	ND	ND	ND
HeptaBDE	mg/kg	5		ND	ND	ND	ND
OctaBDE	mg/kg	5		ND	ND	ND	ND
NonaBDE	mg/kg	5		ND	ND	ND	ND
DecaBDE	mg/kg	5		ND	ND	ND	ND
Sum of PBDEs	mg/kg	-11	1000	ND	ND	ND	ND
Dibutyl phthalate (DBP)	mg/kg	50	1000	ND	ND	ND	ND
Butyl benzyl phthalate (BBP)	mg/kg	50	1000	ND	ND	ND	ND
Di-2-ethylhexyl phthalate (DEHP)	mg/kg	50	1000	ND	ND	ND	ND
Diisobuty phthalate (DIBP)	mg/kg	50	1000	ND	ND	ND	ND
Conclusion	-	64		PASS	PASS	PASS	PASS

	Unit	MDL	Maximum Allowable Limit (Req.)	Result
Test Item	10-		- / /	13
Parameter	-	-	X/ V	-
Lead (Pb)	mg/kg	2	1000	ND
Cadmium (Cd)	mg/kg	2	100	ND
Mercury (Hg)	mg/kg	2	1000	ND
Chromium VI (Cr VI)	mg/kg	2	1000	ND
MonoBB	mg/kg	5		ND
DiBB	mg/kg	5		ND
TriBB	mg/kg	5		ND
TetraBB	mg/kg	5		ND



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PentaBB	mg/kg	5		ND
HexaBB	mg/kg	5		ND
HeptaBB	mg/kg	5		ND
OctaBB	mg/kg	5	1 1	ND
NonaBB	mg/kg	5]]	ND
DecaBB	mg/kg	5		ND
Sum of PBBs	mg/kg	-	1000	ND
MonoBDE	mg/kg	5		ND
DiBDE	mg/kg	5		ND
TriBDE	mg/kg	5		ND
TetraBDE	mg/kg	5		ND
PentaBDE	mg/kg	5		ND
HexaBDE	mg/kg	5		ND
HeptaBDE	mg/kg	5		ND
OctaBDE	mg/kg	5		ND
NonaBDE	mg/kg	5] \	ND
DecaBDE	mg/kg	5		ND
Sum of PBDEs	mg/kg	K13	1000	ND
Dibutyl phthalate (DBP)	mg/kg	50	1000	ND
Butyl benzyl phthalate (BBP)	mg/kg	50	1000	ND
Di-2-ethylhexyl phthalate (DEHP)	mg/kg	50	1000	ND ND
Diisobuty phthalate (DIBP)	mg/kg	50	1000	ND
Conclusion	-	0 = .		PASS

Remark:

- The list of analytes is summarized in table of Appendix.
- 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).
- 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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APPENDIX

List	of Analytes and their Corresponding Test Methods [E	uropean Parliament and Council Directive 2011/65/EU] :
No.	Name of Analytes	Test Method(s)
1	Lead (Pb)	MEH. C. V. IEO 20004 E 2010
2	Cadmium (Cd)	With reference to IEC 62321-5: 2013.
3	Mercury (Hg)	With reference to IEC 62321-4: 2013+AMD1: 2017 CSV.
4	Chromium VI (Cr VI)	Metal: With reference to IEC 62321-7-1:2015. Polymers & Electronics: With reference to IEC 62321-7-2: 2017.
5	Polybromobiphenyls (PBBs) - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	
6	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)	With reference to IEC 62321-6:2015.
7	Dibutyl phthalate (DBP) Butyl benzyl phthalate (BBP) Di-2-ethylhexyl phthalate (DEHP) Diisobuty phthalate (DIBP)	Reference to IEC 62321-8: 2017.



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SAMPLE REFERENCE PHOTO:









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