

TEST REPORT

Page 1 of 8

REPORT NUMBER : TURT200105372
APPLICANT NAME : Bor Billet Alüminyum San.ve Tic.Ltd.Şti.
ADDRESS : Veliköy O.S.B. Veliköy Çerkezköy/Tekirdağ
Fax:0282 746 10 85Çerkezköy Tekirdağ / TURKEY
TEL:0282 746 10 85FAX:0282 746 10 85
Attention : Koray Turbalıoğlu (koray@boraluminum.com.tr)
SAMPLE DESCRIPTION : See attachment
DATE IN : 18 August ,2020 (10:51:00)
DATE OUT : 25 August ,2020
REQUEST. Rohs Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU
RESULTS: See attachment

KAY

Kubra AKGUN
Customer Care Executive

Zeynep AKIN

Zeynep AKIN
Chemical Laboratory Manager

Intertek Test Hizmetleri A.S.
Merkez Mahallesi Sanayi Cad. No.23 Altindag Plaza Yenibosna-34197 /ISTANBUL
Phone : +90 212 496 46 46 Fax: +90 212 452 80 55
e-mail : intertekg.turkiye@intertek.com
<http://www.intertek-turkey.com>

200105372

		CONCLUSION
PART	DESCRIPTION	
Sample 1	Silver metal item - Boya	Pass
Sample 2	Silver metal item - Pres	Pass
Sample 3	Silver metal item - Eloksal	Pass
Sample 4	Silver metal item -Kromat	Pass

This report (including any enclosures and attachments) are prepared for the exclusive use of the Customer(s) named in the report and solely for the purpose for which it is provided and on the basis of instructions and information and/or materials supplied by Intertek's Customer. The test results relate only to the specific items tested and are not intended to be a recommendation for any particular course of action. Customer is responsible for acting as it sees fit on the basis of such results. Unless Intertek provide express prior written consent, no part of this report should be reproduced, distributed or communicated to any third party, nor could it be used for PR activities. Intertek do not accept any liability if this report is used for an alternative purpose from which it is intended, nor do Intertek owe any duty of care to any third party in respect of this report. Except where explicitly agreed in writing, all work and services performed is governed by Intertek Standard Terms and Conditions of Service which is available on request or can be obtained at <http://www.intertek.com/terms>. Testing reports without signature are not valid. The sample has been provided by the customer and the results apply to the sample as received. Sample information is supplied by the customer. Unless otherwise requested, this laboratory applies shared risk decision rule. Tests marked (*) in this test report are not included in the TÜRKAK accreditation schedule for this laboratory.

TEST REPORT

25 August ,2020

REPORT : TURT200105372

Page 3 of 8

(A) TEST RESULT SUMMARY ACCORDING TO IEC 62321

Electrotechnical Products-Determination of Levels of Six Regulated Substances

TESTING ITEM	RESULT		
	Sample 1	Sample 2	Sample 3
	Part	Part	Part
Cadmium (Cd) Content	ND	ND	ND
Chromium VI (Cr+6) Content (ppm) (for non- metal)	NA	NA	NA
Chromium VI (Cr+6) Content (µg/cm ²) (for metal)	ND	ND	ND
Lead (Pb) Content	54 ppm	61 ppm	299 ppm
Mercury (Hg) Content	ND	ND	ND
Flame Retardants			
Polybrominated Biphenyls (PBB)	NA	NA	NA
Monobromobiphenyl (MonoBB)	NA	NA	NA
Dibromobiphenyl (DiBB)	NA	NA	NA
Tribromobiphenyl (TriBB)	NA	NA	NA
Tetrabromobiphenyl (TetraBB)	NA	NA	NA
Pentabromobiphenyl (PentaBB)	NA	NA	NA
Hexabromobiphenyl (HexaBB)	NA	NA	NA
Heptabromobiphenyl (HeptaBB)	NA	NA	NA
Octabromobiphenyl (OctaBB)	NA	NA	NA
Nonabromobiphenyl (NonaBB)	NA	NA	NA
Decabromobiphenyl (DecaBB)	NA	NA	NA
Polybrominated Diphenyl Ethers (PBDE)	NA	NA	NA
Monobromodiphenyl Ether (MonoBDE)	NA	NA	NA
Dibromodiphenyl Ether (DiBDE)	NA	NA	NA
Tribromodiphenyl Ether (TriBDE)	NA	NA	NA
Tetrabromodiphenyl Ether (TetraBDE)	NA	NA	NA
Pentabromodiphenyl Ether (PentaBDE)	NA	NA	NA
Hexabromodiphenyl Ether (HexaBDE)	NA	NA	NA
Heptabromodiphenyl Ether (HeptaBDE)	NA	NA	NA
Octabromodiphenyl Ether (OctaBDE)	NA	NA	NA
Nonabromodiphenyl Ether (NonaBDE)	NA	NA	NA
Decabromodiphenyl Ether (DecaBDE)	NA	NA	NA

Remarks : ppm=Parts per million based on dry weight of sample
 µg/cm²=Microgram per square centimetre
 mg/kg with 50 cm²=Milligram per kilogram with 50 square centimetre
 ND =Not detected NA =Not applicable NR =Not requested

TEST REPORT

25 August ,2020

REPORT : TURT200105372

Page 4 of 8

TESTING ITEM	RESULT		
	Sample 1	Sample 2	Sample 3
	Part	Part	Part
Phthalates			
Dibutyl phthalate (DBP) (84-74-2)	NA	NA	NA
Di(2-ethylhexyl) phthalate (DEHP) (117-81-7)	NA	NA	NA
Benzyl butyl phthalate (BBP) (85-68-7)	NA	NA	NA
Diisobutyl Phthalate (DIBP) (84-69-5)	NA	NA	NA

TESTING ITEM	RESULT
	Sample 4
	Part
Cadmium (Cd) Content	ND
Chromium VI (Cr+6) Content (ppm) (for non- metal)	NA
Chromium VI (Cr+6) Content ($\mu\text{g}/\text{cm}^2$) (for metal)	ND
Lead (Pb) Content	53 ppm
Mercury (Hg) Content	ND
Flame Retardants	
Polybrominated Biphenyls (PBB)	NA
Monobromobiphenyl (MonoBB)	NA
Dibromobiphenyl (DiBB)	NA
Tribromobiphenyl (TriBB)	NA
Tetrabromobiphenyl (TetraBB)	NA
Pentabromobiphenyl (PentaBB)	NA
Hexabromobiphenyl (HexaBB)	NA
Heptabromobiphenyl (HeptaBB)	NA
Octabromobiphenyl (OctaBB)	NA
Nonabromobiphenyl (NonaBB)	NA
Decabromobiphenyl (DecaBB)	NA

Remarks : ppm=Parts per million based on dry weight of sample
 $\mu\text{g}/\text{cm}^2$ =Microgram per square centimetre
 mg/kg with 50 cm^2 =Milligram per kilogram with 50 square centimetre
 ND =Not detected NA =Not applicable NR =Not requested

TEST REPORT

25 August ,2020

REPORT : TURT200105372

Page 5 of 8

TESTING ITEM	RESULT
	Sample 4
	Part
Polybrominated Diphenyl Ethers (PBDE)	NA
Monobromodiphenyl Ether (MonoBDE)	NA
Dibromodiphenyl Ether (DiBDE)	NA
Tribromodiphenyl Ether (TriBDE)	NA
Tetrabromodiphenyl Ether (TetraBDE)	NA
Pentabromodiphenyl Ether (PentaBDE)	NA
Hexabromodiphenyl Ether (HexaBDE)	NA
Heptabromodiphenyl Ether (HeptaBDE)	NA
Octabromodiphenyl Ether (OctaBDE)	NA
Nonabromodiphenyl Ether (NonaBDE)	NA
Decabromodiphenyl Ether (DecaBDE)	NA
Phthalates	
Dibutyl phthalate (DBP) (84-74-2)	NA
Di(2-ethylhexyl) phthalate (DEHP) (117-81-7)	NA
Benzyl butyl phthalate (BBP) (85-68-7)	NA
Diisobutyl Phthalate (DIBP) (84-69-5)	NA

Remarks : ppm=Parts per million based on dry weight of sample
µg/cm²=Microgram per square centimetre
mg/kg with 50 cm²=Milligram per kilogram with 50 square centimetre
ND =Not detected NA =Not applicable NR =Not requested

TEST REPORT

25 August ,2020

REPORT : TURT200105372

Page 6 of 8

(B) REQUIREMENT:

SUBSTANCE	LIMITS	
Cadmium (Cd) Content	0.01 % (100 ppm)	
Chromium VI (Cr+6) Content (ppm) (for non metal)	0.1 % (1000 ppm)	
Chromium VI (Cr+6) Content ($\mu\text{g}/\text{cm}^2$) (for metal)	<u>Colorimetric result</u>	<u>Qualitative Result</u>
	< 0.10 $\mu\text{g}/\text{cm}^2$	Negative
	$\geq 0.10 \mu\text{g}/\text{cm}^2$ and $\leq 0.13 \mu\text{g}/\text{cm}^2$	Inconclusive
	> 0.13 $\mu\text{g}/\text{cm}^2$	Positive
Lead (Pb) Content	0.1 % (1000 ppm)	
Mercury (Hg) Content	0.1 % (1000 ppm)	
Flame Retardants	0.1 % (1000 ppm)	
Dibutyl Phthalate (DBP)	0.1 % (1000 ppm)	
Diethyl Hexyl Phthalate (DEHP)	0.1 % (1000 ppm)	
Benzyl Butyl Phthalate (BBP)	0.1 % (1000 ppm)	
Diisobutyl Phthalate (DIBP)	0.1 % (1000 ppm)	

TEST REPORT

25 August ,2020

REPORT : TURT200105372

Page 7 of 8

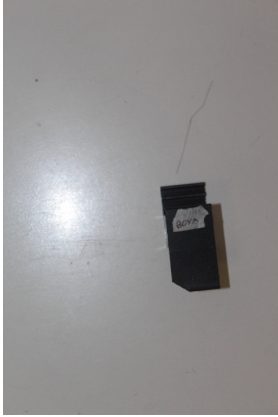
(C) TEST METHOD :

Testing Item	Testing Method	Reporting Limit
Cadmium (Cd)Content	With reference to IEC 62321-5:2013,by microwave or acid digestion and determined by ICP-OES	Plastic : 2.5 ppm, Metal : 5 ppm, Ceramic : 1.25 ppm
Lead (Pb)Content	With reference to IEC 62321-5:2013,by microwave or acid digestion and determined by ICP-OES	Plastic : 5 ppm, Metal : 10 ppm, Ceramic : 2.5 ppm
Mercury (Hg)Content	With reference to IEC 62321-4:2017,by microwave or acid digestion and determined by ICP-OES	Plastic : 5 ppm, Metal : 10 ppm, Ceramic : 2.5 ppm
Chromium VI (Cr6+) (For non-metal)	With reference to IEC 62321-7-2:2017,by alkaline digestion and determined by UV-VIS spectrophotometer	Plastic : 25 ppm (PVC based) /8.33 ppm (other), Ceramic : 8.33 ppm
Chromium VI (Cr6+) (For metal)	With reference to IEC 62321-7-1:2015 ,by boiling water extraction and determined by UV-VIS spectrophotometer	0.1 mg/kg with 50 cm ² (IN TESTING SOLUTION)
PBBs/PBDEs	With reference to IEC 62321-6:2015,by solvent extraction and determined by GC/MS and HPLC	5 ppm
Phthalates	With reference to IEC 62321-8 (111/321/CD), by solvent extraction and determined by GC-MS.	50 ppm

TEST REPORT
REPORT : TURT200105372

25 August ,2020
Page 8 of 8

Sample 1



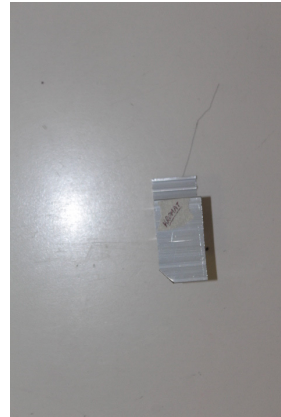
Sample 2



Sample 3



Sample 4



END OF TEST REPORT