



Test
TS EN ISO/IEC 17025
AB-0342-T

AB-0342-T

0111685636a

05/19

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Deney Raporu
Test report

Müşterinin adı/adresi
Customer name/address

GÜVENİR ELKT.İTH.İHR.SAN.VE TİC.LTD.ŞTİ. / BÜYÜKHENDEK CAD.ERSOY
PASAJI 43/52 ŞİŞHANE İSTANBUL İSTANBUL

Alıcı Adı
Buyer name

/

Sipariş/Artikel Numarası
Order/Article No.

- 1-)O.C.M-01S 2.5Amp.dolu pin fiş karkası*
- 2-)O.C.M-03S 10Amp.dolu pin fiş karkası*
- 3-)O.C.M-07SL 16Amp. tek toprak hunili dolu pin fiş karkası*
- 4-)O.C.M-08SL 16Amp. çift toprak hunili dolu pin fiş karkası*
- 5-)O.C.M-09 İngiliz topraklı fiş karkası
- 6-)O.C.M-09 ST İngiliz topraksız fiş karkası
- 7-)O.C.M-11 S Güney afrika topraklı dolu pin fiş karkası
- 8-)O.C.M-11 ST Güney afrika topraksız dolu pin fiş karkası
- 9-)O.C.M-12 S Amerikan topraklı dolu pin fiş karkası
- 10-)O.C.M-12 ST Amerikan topraksız dolu pin fiş karkası
- 11-)O.C.M-14 S İsrail dolu pin fiş karkası
- 12-)O.C.M-16 S İsviçre dolu pin fiş karkası
- 13-)O.C.M-01 H 2.5Amp.boş pin fiş karkası*
- 14-)O.C.M-03 H 10Amp. boş pin fiş karkası*
- 15-)O.C.M-07 HL 16amp. tek topraklı hunili boş pin fiş karkası*
- 16-)O.C.M-08 HL 16Amp. çift toprak hunili boş pin fiş karkası*

Numunenin adı ve tarif
Name and identity of test item

Plug samples

Numunenin kabul tarihi
Date of receipt of test item

2019-04-15 (confirmation date: 19.04.2019)

Açıklamalar
Remarks

The results given in this test report belong to the received sample by vendor.
*Only marked models have been tested. The others have stated on test report reprehensively upon client's claim.
Remark: Revise of test report 0111686844 dated 30.04.2019, item name has been corrected. Preceding test report is no longer valid.

Proje tarihi
Project date

2019-04-22 to 2019-04-30

Raporun Sayfa Sayısı
Number of pages of the Report

8

Test Kapsamı
Test Scope

RoHS Directive in electrical and electronic equipment 2011/65/EU & Amendment Directive (EU) 2015/863

Test Sonucu
Test Result

PASS



TÜV Rheinland
Uluslararası Standartlar Sertifikasyon ve Denetim A.Ş.

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Deney Raporu
Test report

Türk Akreditasyon kurumu (TÜRKAK) deney raporlarının tanınması konusunda Avrupa Akreditasyon Birliği (EA) ve Uluslar arası Laboratuvar Akreditasyon Birliği (ILAC) ile karşılıklı tanınma anlaşmasını imzalamıştır.

The Turkish Accreditation Agency (TÜRKAK) is signatory to the multilateral agreements of the European co-operation for the Accreditation (EA) and of the International Laboratory Accreditation (ILAC) for the Mutual recognition of the test reports.

Deney ve /veya ölçüm sonuçları, genişletilmiş ölçüm belirsizlikleri (olması halinde) ve deney metodları bu sertifikanın tamamlayıcı kısmı olan takip eden sayfalarda verilmiştir.

The test and/or measurement results, the uncertainties (if applicable) with confidence probability and test methods are given on the following, pages which are part of this report.

Tarih
Date

Customer Relations Manager

Chemical Laboratory Manager

2019-05-02

Tomris Hasańebi

Duygu Ozturk

Bu rapor, laboratuvarın yazılı izni olmadan kısmen kopyalanıp çoğaltılamaz. Bu rapor e-imza ile onaylanmıştır.

This test report shall not be reproduced other than in full except with the permission of the laboratory. This test report is signed by e-signature.

Doc No: MS-0010140_en



Material List:

Material No.	Material	Color	Location
M001	Plastic	White	A-"O.C.M-01S 2.5A Dolu Pin" Base;E-"O.C.M-01H 2.5A Boş Pin" Base
M002	Metal	Silver	A-"O.C.M-01S 2.5A Dolu Pin" Metal;E-"O.C.M-01H 2.5A Boş Pin" Metal
M003	Plastic	Black	B-"O.C.M-03S 10A Dolu Pin" Base;C-"O.C.M.-07SL 16A Hunili Dolu Pin" Base;D-"O.C.M-08SL 16A Hunili Dolu Pin" Base;F-"O.C.M-07HL 16A Hunili Boş Pin" Base;G-"O.C.M-08HL 16A Hunili Boş Pin" Base
M004	Metal	Silver	B-"O.C.M-03S 10A Dolu Pin" Metal;C-"O.C.M.-07SL 16A Hunili Dolu Pin" Metal;D-"O.C.M-08SL 16A Hunili Dolu Pin" Metal;F-"O.C.M-07HL 16A Hunili Boş Pin" Metal;G-"O.C.M-08HL 16A Hunili Boş Pin" Metal
M005	Metal	Silver	B-"O.C.M-03S 10A Dolu Pin" Metal Joint;C-"O.C.M.-07SL 16A Hunili Dolu Pin" Metal Joint;D-"O.C.M-08SL 16A Hunili Dolu Pin" Metal Joint;F-"O.C.M-07HL 16A Hunili Boş Pin" Metal Joint;G-"O.C.M-08HL 16A Hunili Boş Pin" Metal Joint

1.(HM) Cadmium, Lead, Chromium (VI), Mercury, Polybrominated biphenyls (PBB) and Polybrominated diphenyl ethers (PBDE)

Test Method: Total Cadmium, Lead, Mercury, Chromium
 - Ref. to IEC 62321-4:2013+AMD1:2017 and IEC 62321-5:2013

Chromium (VI)
 - For Metal material - Ref. to IEC 62321-7-1:2015
 - For Plastic or Electronic material - Ref. to IEC 62321-7-2:2017
 - For Leather material - Ref. to EN ISO 17075-1:2017

PBBs, PBDEs - Ref. to IEC 62321-6:2015

Material List:

Material No.	Material	Color	Location	Remark	Test plan
					A = Test HM only B = Test HM + FR C = Test 4P only D = Test HM + FR +4P E = Test HM + 4P F = Test FR + 4P G = Test FR only
M001	Plastic	White	A-"O.C.M-01S 2.5A Dolu Pin" Base;E-"O.C.M-01H 2.5A Boş Pin" Base	D	D
M002	Metal	Silver	A-"O.C.M-01S 2.5A Dolu Pin" Metal;E-"O.C.M-01H 2.5A Boş Pin" Metal	A	A
M003	Plastic	Black	B-"O.C.M-03S 10A Dolu Pin" Base;C-"O.C.M.-07SL 16A Hunili Dolu Pin" Base;D-"O.C.M-08SL 16A Hunili Dolu Pin" Base;F-"O.C.M-07HL 16A Hunili Boş Pin" Base;G-"O.C.M-08HL 16A Hunili Boş Pin" Base	D	D

M004	Metal	Silver	B-"O.C.M-03S 10A Dolu Pin" Metal;C-"O.C.M.-07SL 16A Hunili Dolu Pin" Metal;D-"O.C.M-08SL 16A Hunili Dolu Pin" Metal;F-"O.C.M-07HL 16A Hunili Boş Pin" Metal;G-"O.C.M-08HL 16A Hunili Boş Pin" Metal	A	A
M005	Metal	Silver	B-"O.C.M-03S 10A Dolu Pin" Metal Joint;C-"O.C.M.-07SL 16A Hunili Dolu Pin" Metal Joint;D-"O.C.M-08SL 16A Hunili Dolu Pin" Metal Joint;F-"O.C.M-07HL 16A Hunili Boş Pin" Metal Joint;G-"O.C.M-08HL 16A Hunili Boş Pin" Metal Joint	A	A

Abbreviation: HM (Heavy metal) = Cd, Pb, Hg, Cr (VI)
 FR (Flame Retardant) = PBBs, PBDEs
 4P=BBP,DBP,DEHP,DIBP

Remark :

1. Component(s)/ materials(s) with an area of less than 2mm x2 mm will not be selected for testing according to RoHS Directive 2011/65/EU due to technical reason.
2. For the test sample does not have detail materials information provided by client, visually identical materials (e.g. wire insulation, solder points, etc.) will be considered as the same material.
3. Solder points on a printing circuit board will be examined several times based on optical anomalies or discoloration of the solder point(s) unless the solder point(s) is obviously generated automatically during production.
4. All other materials will be sampled and tested at one test point representatively.

Test Result:

	Cd	Cr(VI)	Pb	Hg	PBBs (*)	PBDEs (*)
Maximum Permissible Limit (mg/kg)	100	1000	1000	1000	1000	1000

Material No.	(mg/kg)					
	Cd	Cr [^]	Pb	Hg	PBBs (*)	PBDEs (*)
	RL (mg/kg)					
	10	10	10	10	100	100
M001 + M003	n.d.	16.3	n.d.	n.d.	n.d.	n.d.
M002	29.5	35.7	26743*	n.d.	n.a.	n.a.
M004	n.d.	n.d.	25907*	n.d.	n.a.	n.a.
M005	n.d.	n.d.	83.2	n.d.	n.a.	n.a.

Abbreviation:

Pb	= Lead
Cd	= Cadmium
Hg	= Mercury
Cr	= Chromium
Cr (VI)	= Chromium (VI)
PBBs	= Total Polybrominated Biphenyls
PBDEs	= Total Polybrominated Diphenyl Ethers
n.d.	= Not Detected (<RL)
RL	= Reporting Limit
n.a.	= Not Applicable
^	= The total Chromium have been determined
mg/kg	= milligram per kilogram

Remark:

- (*1) The total chromium content in Metal sample was found to be exceeded the maximum permissible limit (1000mg/kg). Thus, the Chromium (VI) content in surface layer have been confirmed with reference to IEC 62321-7-1:2015 Annex.

	Chromium (VI) concentration	Qualitative result
Negative	<0.1µg/cm ²	The sample is negative (-ve) for Cr(VI). The Cr(VI) concentration is below the limit of quantification. The coating is considered a non-Cr(VI) based coating
Inconclusive	≥0.1µg/cm ² and ≤0.13 µg/cm ²	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 trails for the final determination.
Positive	>0.13 µg/cm ²	The sample is positive (+ve) for Cr(VI). Concentration is above the limit of quantification and the statistical margin of error. The sample coating is considered to contain Cr(VI).

* Results exempted due to copper alloy containing up to 4% lead by weight.

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- (*2) The total chromium content in plastic sample or electronic sample was found to be exceeded the maximum permissible limit (0.1%). Thus, the Chromium (VI) content have been confirmed with reference to IEC 62321-7-2:2017.
- (*3) The total chromium content in leather sample was found to be exceeded the maximum permissible limit (0.1%). Thus, the Chromium (VI) content have been confirmed with reference to EN ISO 17075-1:2017.
- (*4) The result was found to be more than the maximum permissible limit.
- (*5) The plating / coating of all the metal sample(s) is not confirmed, it cannot be further mechanically disjoined into different materials.
- (*6) For this mixed sample, the result was found to be more than the maximum permissible limit. It's recommended that individual sample should be tested separately.
- (*7) Due to the lack of samples the client submitted, the reporting limit is scaled up to 0.005/0.01/0.05/0.1%.

3. BBP, DBP, DEHP, DIBP content

Test Method: IEC 62321-8:2017

Test Result:

	BBP	DBP	DEHP	DIBP
Maximum permissible Limit (%)	0.1	0.1	0.1	0.1

Test No.	Material No.	RL (%)			
		BBP	DBP	DEHP	DIBP
		0.005	0.005	0.005	0.005
T001	M001 + M003	n.d.	n.d.	n.d.	n.d.
-	M002	n.a.	n.a.	n.a.	n.a.
-	M004	n.a.	n.a.	n.a.	n.a.
-	M005	n.a.	n.a.	n.a.	n.a.

Abbreviation:
 BBP= Benzylbutyl phthalate
 DBP= Dibutyl phthalate
 DEHP= Bis(2-ethylhexyl) phthalate
 DIBP= Diisobutyl phthalate
 n.d.= Not Detected (< Reporting Limit)
 RL = Reporting Limit
 N.A. = Not Applicable
 %= percentage

- END -