

Rapor No/ <b>Report No:</b> FS2110003833	Yayımlandığı Tarih/ <b>Date:</b> 01/04/2021
Analizin Amacı/ <b>Purpose of Analysis:</b> -	
Müşteri Bilgileri / <b>Customer Information</b>	
Müşteri Adı / <b>Customer Name</b>	Orego Ambalaj San. ve Tic. A.Ş.
Adres / <b>Address</b>	Osmangazi mah. 2647. Sok., No:5 /1C 34522, Kırcaç, Esenyurt, İstanbul, TURKEY,
Numune Bilgileri / <b>Sample Information</b>	
Adı / <b>Name</b>	Plastik Kap - PP Gıda Ambalajı - Plastic Cup - PP Food Packaging
Üretici Adı / <b>Producer Name</b>	Orego Ambalaj San. ve Tic. A.Ş
Tanımı ve Seri - Parti No / <b>Description and Batch Number</b>	65943
Üretim ve Son Kullanma Tarihi / <b>Production &amp; Expiry Date</b>	02.03.2021
Ambalajı ve Miktarı / <b>Package and Quantity</b>	3x kilitli poşet / zipped package
İlgili Kişi / <b>Contact Person</b>	Ceyda Mamal [ceyda.mamal@orego.com.tr ]
Numune kabul tarihi / <b>Sample received / transport by</b>	05/03/2021 kargo / parcel services
Numune alım sıcaklığı / <b>Sample temp when received</b>	
Numuneyi teslim alan ve mühür / <b>Submitted by &amp; Seal</b>	Müşteri Mühürsüz / Client None/
Teklif No / <b>Quotation No</b>	1072R1
Analiz başlama ve bitiş zamanı / <b>Start / End of analysis</b>	05.03.2021 / 01.04.2021
Açıklamalar / <b>Remarks</b>	

Özgür Can Feridun  
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Section**

01/04/2021

Tasdik Olunur / **Approved by**  
Laboratuvar Müdürü / **Laboratory Manager**  
Çiğdem Kalın Vatansver



Bu analiz raporu adli -idari işlemlerde ve reklam amacıyla kullanılamaz. Bu analiz raporunun hiçbir bölümü laboratuvarın yazılı izni olmadan kısmen kopyalanıp, çoğaltılamaz, tek başına veya ayrı ayrı kullanılamaz. Müşteri bilgileri ve numune bilgileri müşteri tarafından sağlanmıştır. Bilginin müşteri tarafından sağlandığı durumlar hariç, raporda verilen tüm bilgilerden laboratuvarımız sorumludur. Bu rapor (üst yazı ve ekler dahil), müşteri tarafından sağlanan numuneye ait tanım, talimat, bilgi, materyal ve/veya koşullar temelinde raporda belirtilen müşterinin talebine uygun olarak münhasır kullanımı için hazırlanmıştır. Analiz sonuçları yukarıda belirtilen numune için geçerlidir. İmzasız ve mühürsüz raporlar geçersizdir.

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Yayımlandığı Tarih/ **Date:** 01/04/2021

Analizler / **Analyses**

No	Analiz Adı <b>Analysis Name</b>	Sonuç <b>Results</b>	Ölçüm Limiti <b>LOQ</b>	Geri Kazanım <b>Recovery</b>	Ölçüm Belirsizliği <b>Uncertainty</b>	Metot <b>Method</b>	Limit <b>Requirement</b>	Değerlendirme <b>Interpretation</b>
1	23 Metal Migrasyonu <b>Metal Migration 23</b>	Sonuçlar ektedir / The results are attached		-	-	TS EN 13130-1 ISO 17294-1&2	= ektedir/ as attached a	Uygun : <b>Pass</b>
2	(§) Primer Aromatik Aminler (PAA) <b>PAA</b>	(§) Taşeron analiz raporu ektedir. / (§) Subcon analysis report is attached.	-	-		EUR 24812, EN 2011		

LOQ: Ölçüm Limiti / **Limit of Quantification** LOD: Tespit Limiti / **Limit of Detection**

Bazı analizler Ar-Ge amaçlı olarak çalışılmakta ve sonuçlandırılmaktadır. / **Some analyses are performed and resulted for R-D purposes in scope of private demand.**

(±)  $k=2$ , % 95 güven aralığında genişletilmiş ölçüm belirsizliği, numune alma belirsizliği içermeyecek şekilde hesaplanmıştır. Aksi belirtilmediği sürece analiz değerlendirilmesinde Paylaşılan Risk Karar Kuralı (Basit Kabul Kuralı) uygulanır. Farklı karar kuralı uygulanan değerlendirmeler uygunluk notu olarak belirtilmiştir. / **The reported which is not contain sampling uncertainty value uncertainty is an expanded uncertainty calculated using a coverage factor of 2 which gives a level of confidence of approximately 95%. Unless otherwise specified, the results are evaluated according to Shared Risk Decision Rule (Simple Acceptance Rule). Other evaluation rules which are applied, indicated as interpretation comment.**

ª Türk Gıda Kodeksi Gıda ile Temas Eden Madde ve Malzemeler Tebliği 2019/44 ve Commission Regulation EU No:10/2011- EU 2016/1416- EU 2017/752 – EU 2020/1245 e göre değerlendirme yapılmıştır. / Analyses results were interpreted according to Turkish Food Codex Food Contact Matter and Material Communique 2019/44 and Commission Regulation EU No: 10/2011, amendment EU 2016/1416, amendment EU2017/752, amendment EU 2020/1245.

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Rapor Sonu / **End of Report**



Spesifik Metal Migrasyonu / **Specific Migration of Metals**

EU No.10/2011 sayılı Komisyon Yönetmeliğine EU 2020/1245 olarak yapılan değişiklik, ICP-MS analizleri /  
**As per Commission Regulation (EU) No. 10/2011 and its amendment (EU) 2020/1245, by ICP/MS analysis (1)**

I. Test Koşulları / **Test Conditions**

Test Edilen Malzeme / <b>Tested component</b>	Gıda veya Gıda Simulanti / <b>Food or Food Simulant</b>	Süre (gün) / <b>Time (days)</b>	Sıcaklık / <b>Temperature</b> (°C)	Gıda temas yüzey alan hacim oranı / <b>Ratio of food contact surface area to volume</b>	
				dm <sup>2</sup>	mL
Plastik Kap - PP Gıda Ambalajı - Plastic Cup - PP Food Packaging	3% (w/v) asetik asit / <b>acetic acid</b>	10	40	1	150

II. Test Metodu / **Test Method**

TS EN 13130-1, ISO 17294-1&2

III. Test Sonuçları / **Test results:**

Element	Sonuç / <b>Result</b> (mg/kg)		Tespit Limiti / <b>Detection limit</b>	SML Limit (mg/kg) (1)
	1. Migrasyon / <b>1<sup>st</sup> migration</b>		(mg/kg)	
Baryum / <b>Barium</b> (Ba)	TED / <b>ND</b>		0.007	1 (max.)
Kobalt / <b>Cobalt</b> (Co)	TED / <b>ND</b>		0.007	0.05 (max.)
Bakır / <b>Copper</b> (Cu)	TED / <b>ND</b>		0.007	5 (max.)
Demir / <b>Iron</b> (Fe)	0.023		0.008	48 (max.)
Lityum / <b>Lithium</b> (Li)	TED / <b>ND</b>		0.008	0.6 (max.)
Mangan / <b>Manganese</b> (Mn)	TED / <b>ND</b>		0.007	0.6 (max.)
Çinko / <b>Zinc</b> (Zn)	0.04		0.010	5 (max.)
Alüminyum / <b>Aluminium</b> (Al)	TED / <b>ND</b>		0.008	1(max)
Nikel / <b>Nickel</b> (Ni)	TED / <b>ND</b>		0.007	0.02(max)
Antimon / <b>Antimony</b> (Sb)	TED / <b>ND</b>		0.003	0.04(max.)
Arsenik / <b>Arsenic</b> (As)	TED / <b>ND</b>		0.0002	ND(0.002)
Kadmiyum / <b>Cadmium</b> (Cd)	TED / <b>ND</b>		0.0009	ND(0.002)
Kurşun / <b>Lead</b> (Pb)	TED / <b>ND</b>		0.002	ND(0.003)
Civa / <b>Mercury</b> (Hg)	TED / <b>ND</b>		0.0001	ND(0.007)
Evropiyum / <b>Europium</b> (Eu)	TED / <b>ND</b>	Toplam / <b>Sum</b> : TED / <b>ND</b>	TED / <b>ND</b>	0.05 toplam / <b>sum</b> (max.)
Gadolinium / <b>Gadolinium</b> (Gd)	TED / <b>ND</b>			
Lantan / <b>Lanthanum</b> (La)	TED / <b>ND</b>			
Terbiyum / <b>Terbium</b> (Tb)	TED / <b>ND</b>			
Krom / <b>Chromium</b> (Cr) #	TED / <b>ND</b>		0.001	ND(0.01)
Kalsiyum / <b>Calcium</b> (Ca)	TED / <b>ND</b>		0.100	-
Potasyum / <b>Potassium</b> (K)	TED / <b>ND</b>		0.100	-
Magnezyum / <b>Magnesium</b> (Mg)	0.003		0.003	-
Sodyum / <b>Sodium</b> (Na)	0.06		0.006	-

TED / **ND** = Tespit Edilemedi / **Not detected**

# = Eğer toplam krom migrasyonu sonucu 0.01 mg/kg ve 3.6 mg/kg arasında ise, krom (VI) plastik malzemelerde tespit edilemez şekilde değerlendirilmektedir. /  
**When migration of total chromium is between 0.01 mg/kg and 3.6 mg/kg, chromium (VI) content in plastic shall be not dete**

# TEST REPORT

Applicant: OREGO AMBALAJ SAN. VE TIC. A.S.  
OSMANGAZI MAH 2647 SOK  
NO: 5/1C 34522 KIRAC ESENYURT  
ISTANBUL TURKEY

Number: HKGH02696546

Date: Apr 01, 2021

Submitted sample said to be :  
Item Name : **FS2110003833 - Plastik Kap - PP Gida Ambalaji - Plastic Cup - PP Food Packaging**  
Quantity : 1 set



\*\*\*\*\*

**Conclusion:**  
The submitted sample was tested under the following requirements requested by the applicant, subject to the information stated in the remark and attached page(s) for details :

Requirement	Result
(1) European Commission Regulation No. 10/2011 Annex II, Regulation No. 2016/1416, Regulation No. 2020/1245 and Regulation No. 1935/2004 - Specific Migration of Primary Aromatic Amines	Pass

\*\*\*\*\*

**Decision Rule(s):**  
When a statement of conformity to a specification or standard is provided on test report, the decision rule shall be applied. For details, please refer to Intertek's "Decision Rule Document" and is available on Intertek's website. <https://intertekhk.grd.by/decision-rule-doc..>  
If decision rule already inherited in the requested specification or standard, Intertek's "Decision Rule Document" is not applicable and indication of "∞" was shown as above table.

\*\*\*\*\*

For and on behalf of :  
Intertek Testing Services HK Ltd.

Cindy I.K. Chan  
Vice President



# TEST REPORT

Number : HKGH02696546

(1) Specific Migration of Primary Aromatic Amines

Test standard : Commission Regulation (EU) No. 10/2011 and its amendments and JRC Technical Guidelines EN24815 EN2011, By Liquid Chromatograph - Tandem Mass Spectrometry (LC-MS/MS) Analysis.

I. Test condition :

3% (w/v) Acetic acid	
Time	Temperature
10 days	40 °C

II. Test result :

Compound		Result (mg/kg)	Detection Limit (mg/kg)	Limit (mg/kg)
		(1)		
4-Aminodiphenyl	92-67-1	ND	0.002	ND
Benzidine	92-87-5	ND	0.002	ND
4-Chloro-o-toluidine	95-69-2	ND	0.002	ND
2-Naphthylamine	91-59-8	ND	0.002	ND
o-Aminoazotoluene	97-56-3	ND	0.002	ND
2-Amino-4-nitrotoluene	99-55-8	ND	0.002	ND
p-Chloroaniline	106-47-8	ND	0.002	ND
2,4-Diaminoanisole	615-05-4	ND	0.002	ND
4,4'-Diaminodiphenylmethane	101-77-9	ND	0.002	ND
3,3'-Dichlorobenzidine	91-94-1	ND	0.002	ND
3,3'-Dimethoxybenzidine	119-90-4	ND	0.002	ND
3,3'-Dimethylbenzidine	119-93-7	ND	0.002	ND
3,3'-Dimethyl-4,4'-diamino diphenylmethane	838-88-0	ND	0.002	ND
p-Cresidine	120-71-8	ND	0.002	ND
4,4'-Methylene-bis (2-chloroaniline)	101-14-4	ND	0.002	ND
4,4'-Oxydianiline	101-80-4	ND	0.002	ND
4,4'-Thiodianiline	139-65-1	ND	0.002	ND
o-Toluidine	95-53-4	ND	0.002	ND
2,4-Toluylenediamine	95-80-7	ND	0.002	ND
2,4,5-Trimethylaniline	137-17-7	ND	0.002	ND
o-Anisidine	90-04-0	ND	0.002	ND
4-Aminoazobenzene	60-09-3	ND	0.002	ND
m-Phenylenediamine	108-45-2	ND	0.002	ND
Benzoguanamin	91-76-9	ND	0.05	5
4,4'-Methylenebis(3-chloro-2,6-diethylaniline)	106246-33-7	ND	0.05	0.05
Total of other primary aromatic amines	/	ND	0.010	0.010

\*\*\*\*\*



# TEST REPORT

Number : HKGH02696546

Remark :

ND = Not detected

As per client's request, the above condition and food simulant were used for the test.

Tested Component :

(1) Transparent PP plastic.

Date sample received : Mar 15, 2021

Testing period : Mar 15, 2021 to Apr 01, 2021

\*\*\*\*\*

End of report

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