



TEST REPORT

LAB LOCATION: TURKEY

LAB NO. : (7221)084-0357

SERVICE TYPE: Regular

DATE IN: March 25th, 2021

DATE OUT: April 02nd, 2021

MATERIAL SUBMITTED : KUMTEL DAYANIKLI TUKETIM MALLARI PLAS. SAN. TIC. A.Ş.
(Attn: cert@kumtel.com)

SUPPLIER REFERENCE : /

STYLE NO : /

PO NUMBER : /

COLOR : /

BUYER : /

MANUFACTURER : /

COUNTRY OF ORIGIN : TURKEY

COUNTRY OF DESTINATION : EUROPE, FRANCE, ITALY, GERMANY

SAMPLE DESCRIPTION : **Sample A:** Wire Grid

COLOR : /

GENERAL CONCLUSION : **PASS**

SUMMARY OF TEST RESULTS

TEST REQUIRED	Sample A
Total Lead, Cadmium, Arsenic Content for Metal Plating in Contact with Foodstuffs – Regulation 1935/2004, French Decree 2007-766 and French DGCCRF Sheet “MCDA n°1 (V02 – 01/04/2017) Food contact - Metals and alloys	P
Overall Migration Test – Decreto Ministeriale del 21/03/1973 of Capo V - Oggetti di Vetro	P
Extractable Heavy Metals	P
Sensory Test (Odour and Taste) - Simulant Water	P
Migration of Nickel, Chromium, Manganese Test – Decreto Ministeriale del 21/03/1973 of Capo VI - Oggetti di	P
Migration of Chromium and Iron Decreto Ministeriale n 243 del 01/06/1988 Allegato II & III C	P

P: PASS

F: FAIL

EXECUTIVE SUMMARY: Only vendor selected tests have been performed and submitted samples have been rated as “PASS”.

C/N GY/EY

BV CPS TEST LABORATUVARLARI LTD. STI.
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Our report includes all the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from the date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Testing reports without signature are not valid.

BV CPS Test Laboratories Ltd.Şti. is not responsible for deviations for the accuracy of the information provided by the customer that may affect the validity of the test results. The sample(s) were sent to BV CPS Test Laboratories Ltd.Şti by the client/vendor via courier, cargo and/or manual delivery. Therefore, sampling was not done BV CPS. Test results given in this test report represent only the sample(s) delivered to laboratory.

When a statement of conformity (Pass/Fail) is given regarding the test results the value of measurement uncertainty is evaluated according to the Shared Risk Decision Rule and conformity assessment is reported without evaluating measurement uncertainty.

**Bureau Veritas Consumer Products Services Turkey
BV CPS Test Lab. Ltd. Sti.**

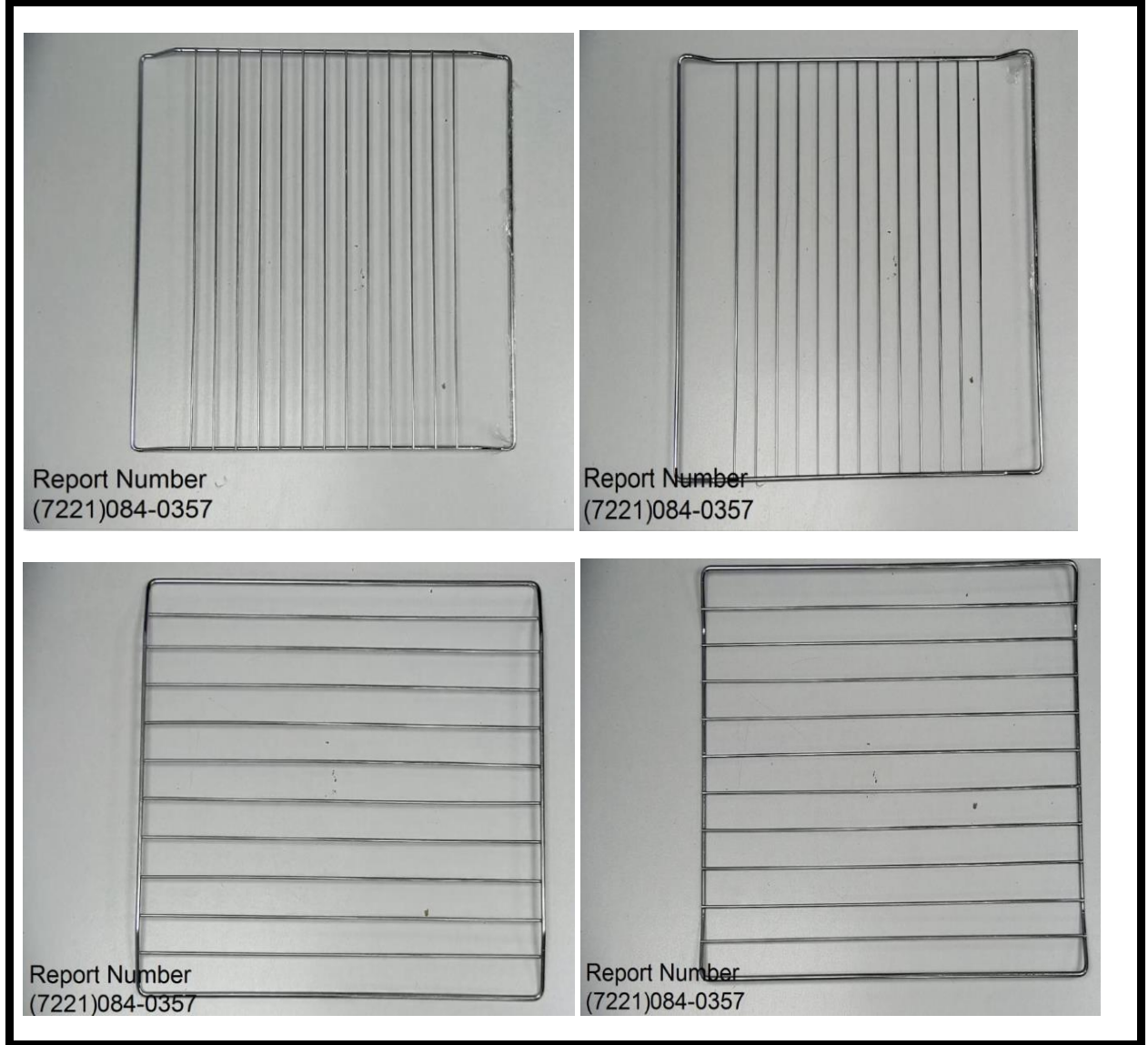


Eylem Yaldizli Murat
Senior Client Team Lead -Hardline

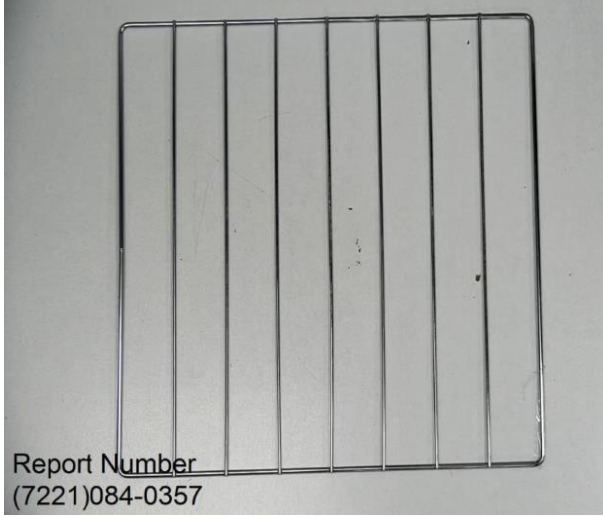


Yagiz Barin
Hardline & Pharma Lab. Manager

-Photo of the Submitted Sample-



-Photo of the Submitted Sample-



TEST RESULT

Total Lead, Cadmium, Arsenic Content for Steel in Contact with Foodstuffs – Regulation 1935/2004, French Decree 2007-766 and French DGCCRF Sheet “MCDA n°1 (V02 – 01/04/2017) Food contact - Metals and alloys (Pb, Cd, As)

Test Method: Acid digestion and analysis by Inductively Coupled Argon Plasma Spectrometer (ICP).

Tested Item(s) : I001 Wire Grid

Parameter	Unit	Result	Maximum Allowable Limit
		I001	
Arsenic (As)	%	0.0054	<0.03
Cadmium (Cd)	%	<0.001	<0.01
Lead (Pb)	%	0.0022	<0.05
Conclusion	-	PASS	-

Note: “<” = less than

Method: Acid digestion and analysis by Inductively Coupled Argon Plasma Spectrometer (ICP).

TEST RESULTS

Extractable Heavy Metals

Test Method : With reference to Metals and Alloys used in Food Contact Materials and articles - A Practical Guide to Manufacturers and Regulators (2013 1st Edition) published by European Directorate for the Quality of Medicines and HealthCare (EDQM), Chapter 3.

Test Conditions : 100°C, 0.5 h, 0.5% Citric Acid

Tested Item : I001 Wire Grid
Sample A

Requirement(s) (Every Extraction Food Simulants Used) :	
Type I - Sum of First migrate (Test Sample 1) and Second Migrate (Test Sample 2)	Each Element (Parameter) should be less than or equal to Seven Times of Maximum Specific Release Limit ^[a] (Req.) in Result Table
Type II - Third migrate (Test Sample 3)	Each Element (Parameter) should be less than or equal to Maximum Specific Release Limit ^[a] (Req.) in Result Table

Test Sample(s)		-	-	1	2	Sum of 1 and 2
Parameter	Unit	R.L.	Req.	Result		
Aluminum (Al)	mg/kg	0.1	35	ND	ND	ND
Antimony (Sb)	mg/kg	0.004	1.4	ND	ND	ND
Chromium (Cr)	mg/kg	0.1	7.0	ND	ND	ND
Cobalt (Co)	mg/kg	0.005	0.7	ND	ND	ND
Copper (Cu)	mg/kg	0.002	28	ND	ND	ND
Iron (Fe)	mg/kg	5	280	ND	ND	ND
Magnesium (Mg)	mg/kg	0.5	-	ND	ND	ND
Manganese (Mn)	mg/kg	0.1	12.6	ND	ND	ND
Molybdenum (Mo)	mg/kg	0.01	4.2	ND	ND	ND
Nickel (Ni)	mg/kg	0.02	4.9	ND	ND	ND
Silver (Ag)	mg/kg	0.01	0.56	ND	ND	ND
Tin (Sn)	mg/kg	5	700	ND	ND	ND
Titanium (Ti)	mg/kg	0.5	-	ND	ND	ND
Vanadium (V)	mg/kg	0.002	0.35	ND	ND	ND
Zinc (Zn)	mg/kg	1	35	ND	ND	ND
Arsenic (As)	mg/kg	0.001	0.07	ND	ND	ND
Barium (Ba)	mg/kg	0.1	8.4	ND	ND	ND
Beryllium (Be)	mg/kg	0.001	0.35	ND	ND	ND
Cadmium (Cd)	mg/kg	0.001	0.14	ND	ND	ND
Lead (Pb)	mg/kg	0.002	0.28	ND	ND	ND
Lithium (Li)	mg/kg	0.01	0.336	ND	ND	ND
Mercury (Hg)	mg/kg	0.0004	0.105	ND	ND	ND
Thallium (Tl)	mg/kg	0.00005	0.0035	ND	ND	ND
Conclusion		PASS				

Note / Key :

“<” = Less than

% = percent

Deg. C = degree Celsius

mg/kg = milligram(s) per kilogram in extraction food stimulant

Remark :

- ^[a] denotes as this (these) maximum specific release limit(s) was (were) referenced from Metals and Alloys used in Food Contact Materials and articles - A Practical Guide to Manufacturers and Regulators (2013 1st Edition) published by European Directorate for the Quality of Medicines and HealthCare (EDQM), Chapter 1, Article 4, Tables 1 and 2.
- Acceptable deviation on maximum specific release limit(s) (SRLs) of certain elements was recommended by the Consumer Health Protection Committee (CD-P-SC) of the Biological Standardisation, Network of Official Medicines Control Laboratories (OMCL) and Healthcare Department (DBO) dated on November 18, 2013 (With Document Number RZ/PH/2013-06790L SBA/mfs). See details in Comment.
- Test Item(s) has (have) to comply with both Type I and Type II requirements.
- Appropriate test condition(s) was (were) selected according to Guidelines on Testing Conditions for Articles in Contact with Foodstuffs (With a Focus on Kitchenware) (2009 1st Edition) published by European Commission Joint Research Center (JRC).

Comment :

Acceptable Deviation on Maximum SRLs of Certain Elements expressed in mg/kg :												
Element(s)	Sb	Cr	Co	Mo	Ni	V	As	Be	Cd	Pb	Hg	Tl
Guided SRLs	0.04	0.250	0.01	0.12	0.14	0.01	0.002	0.01	0.005	0.010	0.003	0.0001
Recommended SRLs	0.2	1.0	0.1	0.6	0.7	0.05	0.01	0.05	0.02	0.04	0.015	0.0005

TEST RESULTS

Extractable Heavy Metals

Test Method : With reference to Metals and Alloys used in Food Contact Materials and articles - A Practical Guide to Manufacturers and Regulators (2013 1st Edition) published by European Directorate for the Quality of Medicines and HealthCare (EDQM), Chapter 3.

Test Conditions : 100°C, 0.5h, 0.5% Citric Acid

Requirement(s) (Every Extraction Food Simulants Used) :	
Type I - Sum of First migrate (Test Sample 1) and Second Migrate (Test Sample 2)	Each Element (Parameter) should be less than or equal to Seven Times of Maximum Specific Release Limit ^[a] (Req.) in Result Table
Type II - Third migrate (Test Sample 3)	Each Element (Parameter) should be less than or equal to Maximum Specific Release Limit ^[a] (Req.) in Result Table

Parameter	Unit	R.L.	Req.	Result (3.Migration)
				I001
Aluminum (Al)	mg/kg	0.1	5	ND
Antimony (Sb)	mg/kg	0.004	0.2	ND
Chromium (Cr)	mg/kg	0.1	1.0	ND
Cobalt (Co)	mg/kg	0.005	0.1	ND
Copper (Cu)	mg/kg	0.002	4	ND
Iron (Fe)	mg/kg	5	40	ND
Magnesium (Mg)	mg/kg	0.5	-	ND
Manganese (Mn)	mg/kg	0.1	1.8	ND
Molybdenum (Mo)	mg/kg	0.01	0.6	ND
Nickel (Ni)	mg/kg	0.02	0.7	ND
Silver (Ag)	mg/kg	0.01	0.08	ND
Tin (Sn)	mg/kg	5	100	ND
Titanium (Ti)	mg/kg	0.5	-	ND
Vanadium (V)	mg/kg	0.002	0.05	ND
Zinc (Zn)	mg/kg	1	5	ND
Arsenic (As)	mg/kg	0.001	0.01	ND
Barium (Ba)	mg/kg	0.1	1.2	ND
Beryllium (Be)	mg/kg	0.001	0.05	ND
Cadmium (Cd)	mg/kg	0.001	0.02	ND
Lead (Pb)	mg/kg	0.002	0.04	ND
Lithium (Li)	mg/kg	0.01	0.048	ND
Mercury (Hg)	mg/kg	0.0004	0.015	ND
Thallium (Tl)	mg/kg	0.00005	0.0005	ND
Conclusion		-	-	PASS

Note / Key :

“<” = Less than
mg/kg = milligram(s) per kilogram in extraction food stimulant

% = percent

Deg. C = degree Celsius

Remark :

- ^[a] denotes as this (these) maximum specific release limit(s) was (were) referenced from Metals and Alloys used in Food Contact Materials and articles - A Practical Guide to Manufacturers and Regulators (2013 1st Edition) published by European Directorate for the Quality of Medicines and HealthCare (EDQM), Chapter 1, Article 4, Tables 1 and 2.
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- Test Item(s) has (have) to comply with both Type I and Type II requirements.
- Appropriate test condition(s) was (were) selected according to Guidelines on Testing Conditions for Articles in Contact with Foodstuffs (With a Focus on Kitchenware) (2009 1st Edition) published by European Commission Joint Research Center (JRC).

Comment :

Acceptable Deviation on Maximum SRLs of Certain Elements expressed in mg/kg :												
Element(s)	Sb	Cr	Co	Mo	Ni	V	As	Be	Cd	Pb	Hg	Tl
Guided SRLs	0.04	0.250	0.01	0.12	0.14	0.01	0.002	0.01	0.005	0.010	0.003	0.0001
Recommended SRLs	0.2	1.0	0.1	0.6	0.7	0.05	0.01	0.05	0.02	0.04	0.015	0.0005

TEST RESULTS

Migration of Nickel, Chromium, Manganese Test – Decreto Ministeriale del 21/03/1973 of Capo V - Oggetti di

Test Method: EN 1186-1: 2002; Acid digestion and analysis by Inductively Coupled Argon Plasma Spectrometer (ICP).

Test Conditions : 100°C, 0.5h, 0,5% Citric Acid

Tested Item(s) : I001 Wire Grid

Parameter	Unit	Result	Maximum Allowable Limit
		I001	
Nickel (Ni)	ppm	ND	≤0.1
Chromium (Cr)	ppm	ND	≤0.1
Manganese (Mn)	ppm	ND	≤0.1
Conclusion	-	PASS	-

Note: “<” = less than

TEST RESULT

Overall Migration Test – Decreto Ministeriale del 21/03/1973 of Capo V - Oggetti di Vetro

Test Condition: 3% Acetic Acid, 100°C, 0.5 hrs on the 3rd contact

Test Conditions : 100°C, 0.5h, 0.5% Citric Acid

Tested Item : I001 Wire Grid
Sample A

Simulant Used	Unit	Result	Maximum Allowable Limit
		I001	
3% Acetic Acid (1. cycle)	mg/dm ²	4.67	8
3% Acetic Acid (2. cycle)	mg/dm ²	2.9	8
3% Acetic Acid (3. cycle)	mg/dm ²	<2.5	8
Conclusion	-	PASS	-

Note: “<” = less than
mg/dm² = milligram per square decimetre
mg/kg = milligram per kilogram

Method: With reference to EN 1186-1: 2002 on the 3rd contact (3 successive contacts).

Remark: 1) The limit refers to Decreto Ministeriale del 21/03/1973 of Capo V - Oggetti di Vetro.
2) Selected test, test conditions and test simulants were specified by client.
3) For article intended for repeated use, the migration tests are carried out three times on the same test sample and the third test result is shown in result table.

TEST RESULT

Sensory Test (Odour and Taste) - Simulant Water

Test method: BV CPS In House Method, CPSD-AN-00084-MTHD, DIN 10955

Test condition: Water, 0,5 hours – 100°C

Tested Item : I001 Wire Grid
Sample A

-	Results				Conc.
Tested Item(s)	Parameter	Limit	Conc.	Unit	
I001	Change of Odour	≤ 2.5	0.3	-	Pass
	Change of Taste	≤ 2.5	0.5	-	Pass

Off-odour in comparison with control

0 = no perceptible off-odour

1 = off-odour just perceptible (but still difficult to define)

2 = slight off-odour

3 = distinct off-odour

4 = strong off-odour

Off-taste in comparison with control

0 = no perceptible off-taste

1 = off-taste just perceptible (but still difficult to define)

2 = slight off-taste

3 = distinct off-taste

4 = strong off-taste

Migration of Chromium and Iron Decreto Ministeriale n 243 del 01/06/1988 Allegato II & III C

Test Method: EN 1186-1: 2002; Acid digestion and analysis by Inductively Coupled Argon Plasma Spectrometer (ICP).

Test Conditions : 100°C, 0.5h, 0.5% Citric Acid

Tested Item(s) : I001 Wire Grid

Parameter	Unit	Result	Maximum Allowable Limit
		I001	
Chromium (Cr)	ppm	ND	0.4
Iron (Fe)	ppm	ND	50
Conclusion	-	PASS	-

Note: “<” = less than

-END OF TEST REPORT-