



INSTITUT PRO TESTOVÁNÍ A CERTIFIKACI, a. s.
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TESTING LABORATORY - TESTING DIVISION

issues

ATTEST
No. 472112961-01

On sample:

Utility ceramics
Large white flat plates without decor
Large white flat plates with decor

Client:

G. Benedikt Karlovy Vary s.r.o.
1. máje 30, 360 06 Karlovy Vary, Czech Republic
ID: 497 11 989

Evaluation of the measured parameters:

The evaluated sample is resistant (excluding the colour No. 19850) to mechanical dishwashing (125 test cycles) according to EN 12875-1, 2.

The evaluated sample resists short and long term microwave heating according to EN 15284.

The evaluated sample resists the thermal shock $t_1-t_2 = 220^\circ\text{C}$ and its endurance at the thermal shock is $\Delta t_{50} = 240^\circ\text{C}$ according to EN 1183.

The evaluated sample is acid-resistant according to ČSN 72 5523.

This Attest was issued on the basis of the accredited test report Ref. No. 472112961-01 issued on March 19, 2020.

Issued on: July 31 2020
Valid till: March 31, 2023



Dipl. Ing. Jiří Samsoněk, Ph.D.
Head of the testing laboratory

Conditions for use of the Attest and associated information:

- 1. The Attest applies only to the sample tested by our laboratory.*
- 2. The Attest remains in effect until production technology, initial materials and standards or corresponding regulations are changed; however, its validity will extend beyond the period of its effect.*
- 3. If further requirements of national or EU legal regulations apply to the product, the Attest does not replace procedures and documents necessary for assessment of compliance with these regulations.*



ATTEST

No. 472112961-01

Utility ceramics

Submitted samples:



Figure No. 1: Large white flat plates with decor

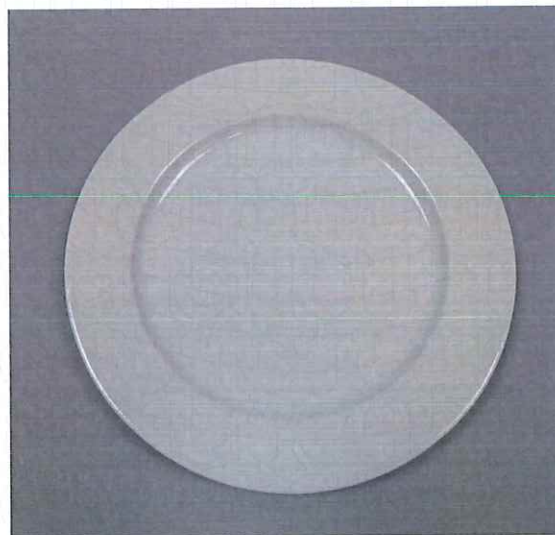


Figure No. 2: Large white flat plates without decor



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ATTEST
No. 472112961-01
Large white flat plates without decor
Values obtained:

Evaluation of the resistance to microwave heating according to ČSN EN 15284

Parameter	Test result		Requirement ¹⁾
	Short heating time	Long heating time	
Crack	without crack	without crack	without crack
Hairline rift	without change	without change	without change
Colour	without change	without change	without change

Note to the table:

- ¹⁾ According to ČSN EN 15284 – If there is any damage, the product is removed from the testing and is not suitable for use in microwave oven

Test results of the thermal shock resistance according to ČSN EN 1183

upper temperature t_1 (°C)	lower temperature t_2 (°C)	temperature difference $t_1 - t_2$ (°C)	number of the damage samples at t_1	total number of the damage samples in %
100	20	80	0	0
110	20	90	0	0
120	20	100	0	0
140	20	120	0	0
160	20	140	0	0
180	20	160	0	0
200	20	180	0	0
220	20	200	0	0
240	20	220	0	0
260	20	240	10	100

Conclusion:

Thermal shock resistance – ČSN EN 1183 - method B

All 10 tested samples cracked at $t_1 - t_2 = 240^\circ\text{C}$. It was damaged 100% samples in total.

Thermal shock endurance – ČSN EN 1183 - method B

$\Delta t_{50} = 240^\circ\text{C}$ (Δt_{50} is the temperature difference, at which 50% of the samples failed), the standard deviation $s = 0$

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ATTEST
No. 472112961-01
Large white flat plates with decor
Values obtained:

Evaluation of dishwasher resistance according to ČSN EN 12875-2
– 125 testing cycles

Sample No.	Unit	Test result			
		Colour	Glossy surface	Resistant deposits and iridescent layers	Other appearance
472112961/1	degree ¹⁾	²⁾	0	0	³⁾

Notes to the table:

- 1) Evaluation according to ČSN EN 12875-2; the test results are the averages of the values from all the numerical values found by each of the inspectors for each of the three samples:
0 – no visible change
1 – just perceptible change
2 – clearly visible change
- 2) colour No. 11859 = degree 1
colour No. 16855 = degree 0.5
colour No. 16856 = degree 1
other colours = degree 0
- 3) colour No. 19850 = degree 2 (highlighted „raised“ colour)
other colours = degree 0

Test results of acid-resistance determination according to ČSN 72 5523

Parameter	Test result	Requirement ¹⁾
Colour	without change	without change
Gloss	without change	without change
Surface appearance	without change	without change

Note to the table:

- 1) According to ČSN 72 5523 the tested product is considered acid-resistant, if there occur no change in its colour, gloss or surface appearance under the test conditions.



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