

Test Report N. 4513 /EL MI17

Spett.le
GRANITI FIANDRE S.p.A.
VIA RADICI NORD 112
42014 CASTELLARANO (MO)

Modena 11/12/2017

Receipt N.: 4.513/EL MI Date of receipt : 08/11/17 Analysis start date: 08/11/17 Analysis end date: 22/11/17

Material: Ceramics materials

Product: Ceramic tile

Sample: CALACATTA SL 300 x 250 cm ACTIVE 2.0
Test information:
-treated specimen: 50 x 50 mm square, 6 mm thickness;
-not-treated specimens: glass 50 x 50 mm square, 6 mm thickness;
-all specimens are rinsed with distilled water and autoclaved at 121°C for 30 minutes before the analysis;
-cover film: polypropylene film 40 x 40 mm square - 0.10 mm thickness;
-test bacteria: Escherichia coli ATCC 8739;
-volume of test inoculum: 150ul.

Sampling: made by customer

Date of sampling: 08/11/17

Test	Method	UM	Result
Antibacterial activity E. coli ATCC 8739*	ISO 22196:2011		
<i>N. bacteria inoculated*</i>		Log (cells/ml)	6,32
<i>Average number of bacteria non treated specimen after inoculation t=0h U0*</i>		Log(cells/cm2)	4,28
<i>Average number of bacteria non treated specimen after 24h Ut*</i>		Log(cells/cm2)	2,98
<i>Average number of bacteria treated specimen after 24h At*</i>		Log(cells/cm2)	<1
<i>Antibacterial activity R*</i>		Log10	3,2

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Test	Method	UM	Result
Antibacterial activity R%*		%	99,94

NOTE :

the test assesses the survival of bacteria type E. coli ATCC 8739 on the surface of CALACATTA SL 300 X 150 cm ACTIVE 2.0 at 37°C for 24h. Under test condition specified in the description sample, the bacterial reduction is equal to 99.94%.

TECHNICAL MANAGER

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Sez.A

U: expanded uncertainty associated with single measurement (P = 95 % - K = 2) - LD: Detection limit (the lowest concentration of analyte detectable) - LQ : Limit of Quantification (the lowest concentration of analyte detected with acceptable precision and accuracy) - R% Recovery % . U - R% - LQ - LD are indicated if required by the Customer . PNN : internal method - ["] Subcontracted test
Reference standards for microbiological food : UNI EN ISO 7218:2013/Cor.1:2014 (counting in single dish and two consecutive dilutions) waters : ISO 8199:2005; (results expressed with < 4ufc/ml and < 40ufc / g indicate that microorganisms are present but less than the value expressed ; for values between 4-10 cfu / ml , 4-10 ufc/100ml , 40-100 cfu / g the number of microorganisms is estimated)
Results of tests with the legal limits are evaluated taking into account the value of the uncertainty and the rules relating to rounding .
Results of tests with the reference values defined by the Customer shall be assessed taking into account the value of the uncertainty only if requested by the Customer. Non-compliant results are given if requested by the Customer.
This Test Report refers only to the sample tested; the name and description of the sample are declared by the Customer . This test report may only be reproduced in full; partial reproduction must be authorized with written approval by the Laboratory . If the test report is digitally signed , the integrity of the document can be confirmed by checking the validity of the digital signature within the file.
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