



CERTOTTICA

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Page 1 / 2

SEZ. R 22

Organismo Notificato UE n. 0530 - Autorizzato dal Ministero dell'Industria, del Commercio e dell'Artigianato e dal Ministero del Lavoro e della Previdenza sociale con D.L. 10/01/95

Client:	LIW LEWANT Spólka z.o.o
	58-260 BIELAWA, ul. Ostroszowicka 17B

Producer	///
Product	Frame
Model	///
Materials	///
Galvanic treatments	///
Varnish	///
Colour	Gun Metal

TEST REPORT Nr.:	052388	Test Report date:	19/09/2005
Job nr.:	C5529	Samples received on:	01/09/2005
Test began on:	07/09/2005	Test was completed on:	16/09/2005
Reference Standard:	ENV 14027, EN 1811		

Responsible for testing:	Date:	19/09/2005
Dr. Giorgio Sommariva		

Note 1: This Test Report is only concerned with the effectively tested samples; any change to the present Report shall be made through a new test report.

Note 2: Partial reproduction of the present Test Report shall be allowed in writing by Certottica.

Reference standard: ENV 14027, EN 1811.

Sample code	Volume of test solution (cm ³)	Area ⁱ (cm ²)	Nickel release d_n^{ii} (µg/cm ² /week)	R.
Temple				
LWC 1	3.70	3.45	0.08	
LWC 2	3.70	3.45	0.02	
LWC 3	3.70	3.45	0.03	
LWC 4	3.70	3.45	0.00	
Rim				
LWC 5	1.60	1.20	0.00	
LWC 6	1.60	1.20	0.01	
LWC 7	1.60	1.20	0.03	
LWC 8	1.60	1.20	0.04	
Bridge				
LWC 9	1.58	1.31	0.31	
LWC 0	1.58	1.31	0.63	

Tested Item	Upper threshold (µg/cm ² /week)	Ni release D^{iii} (µg/cm ² /week)	Adjusted Ni release D^j ^{iv} (µg/cm ² /week)	Result
Temple	0.50	0.03	0.00	Pass
Rim		0.02	0.00	Pass
Bridge		0.47	0.05	Pass

Over All Test Result:	Pass
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ⁱ The test area is the external surface of that portion of item tested.

ⁱⁱ d_n is the value determined through the following equation: $d_n = \frac{(C_1 - C_2) \times V}{a \times 1000}$

where:

a is the sample area of the test object, in square centimetres (cm²);

V is the dilution volume of the sample test solution, in millilitres (ml);

C_n is the nickel concentration in the diluted test solution after one week, in micrograms per litre (µg/l);

C_b is the mean value of nickel concentration in the blank solution after one week, in micrograms per litre (µg/l);

ⁱⁱⁱ D is the value of nickel release not adjusted

^{iv} D^j is the value adjusted analytical figure of nickel release determined through the following equation: $D = \frac{\sum_{i=1}^n (0.1 \times d_n)}{n}$ the processing of the

average has been necessary owing to mistakes introduced during the determination of the surface, during the masking of the insignificant surface and owing to method reproducibility/repetition variation (annex A and D En 1811).