

Test Report

No. 1124-ECS-23

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Test lab accredited by DAkkS D-PL-19590-02

Notified by the Central Authority of the Federal States for Safety Technologies (ZLS) ZLS-NB-0304

Customer

Exolon Group NV
Wakkensesteenweg 47
8700 TIELT
BELGIUM

Manufacturer

Test report contains	Main part and 6 measurement reports
Number of pages in this test report	20
Product	Transparent welding curtain/stripe/screen for arc welding processes
Arrival of the samples	June 01, 2023
Period of testing	June 07 to 19, 2023
Test specifications (Standards)	EN ISO 25980 : 2014
Remarks	Partial tests for recertification

The results described in this test report refer to the mentioned test samples, exclusively. A copy of the test report, complete or in extracts, is not allowed without any written permission of the ECS GmbH Aalen.

Aalen, June 23, 2023



Manuel Hartmann, B.Eng
ECS test engineer

Test objects, tests and results

Based on the tables as written in the standards EN ISO 25980, the main part assigns the test samples to the named tests. The test results are documented according to the named standards.

Signs and symbols

The requirements are described in EN ISO 25980.

+	meet the requirements
–	<i>do not meet the requirements</i>
/	not tested
n.a.	not applicable
n.v.	not available
G	borderline case
<i>Ab</i>	<i>interruption of the testing sequence</i>
BO	Base out
BI	Base in
RT	Room temperature

Whenever the dioptric power of the surface is stated, this value was calculated using the formula $F=0,523/r$, where "r" is the radius of the curved surface.

The relative measurement uncertainties of the applied optical metrological instruments correspond to the required one in EN 167.

Unless stated otherwise, the measurements were carried out in the main viewing point of the specimens and, in the case of lenses with corrective power, at the applicable reference point.

Test results

The annexes document the test results of each individual measurement. All results printed in bold and italic type document that the test sample did actually not meet the requirements which are demanded in the specified standards.

Samples and summary of the test results

Type:	Welding screen, WS green 658, 3mm					
Test report:	11241-ECS-23					
Number of delivered samples:	Four sheets of about 140 * 210 mm ²					
Number of test samples:	5 samples cut out of the sheets					
Test sequence	Requirement	Tests				Samples 23124-1 to -3, -7 and -8
		according to				
		EN	Clause	EN	Clause	
1	Marking	25980	5			n.a.
2	Information delivered by the manufacturer / applicant	25980	6			n.a.
3	General requirements, quality of surface and material	25980	4.1	25980	4.1	+
4	Luminous transmittance	25980	4.2	167	6	+
5	Spectral transmittance in UV-range	25980	4.2	167	6	+
6	Hazard level / risk factor	25980	4.2	25980	4.2	+
7	Luminous reflectance, diffuse	25980	4.3	167	6	+
8	Luminous reflectance, specular	25980	4.3	167	6	+
9	Spectral reflectance in UV-range, diffuse	25980	4.3	167	6	+
10	Spectral reflectance in UV-range, specular	25980	4.3	167	6	-
11	Resistance to ignition	25980	4.5	25980	4.5	+
See the measurement report 1 for the individual results of each test sample.						

Samples and summary of the test results

Type: Welding screen, WS green 658, 4mm						
Test report: 11242-ECS-23						
Number of delivered samples: Four sheets of about 140 * 210 mm ²						
Number of test samples: 5 samples cut out of the sheets						
Test sequence	Requirement	Tests				Samples 23124-9 to -11, -15 and -16
		according to				
		EN	Clause	EN	Clause	
1	Marking	25980	5			n.a.
2	Information delivered by the manufacturer / applicant	25980	6			n.a.
3	General requirements, quality of surface and material	25980	4.1	25980	4.1	+
4	Luminous transmittance	25980	4.2	167	6	+
5	Spectral transmittance in UV-range	25980	4.2	167	6	+
6	Hazard level / risk factor	25980	4.2	25980	4.2	+
7	Luminous reflectance, diffuse	25980	4.3	167	6	+
8	Luminous reflectance, specular	25980	4.3	167	6	+
9	Spectral reflectance in UV-range, diffuse	25980	4.3	167	6	+
10	Spectral reflectance in UV-range, specular	25980	4.3	167	6	-
11	Resistance to ignition	25980	4.5	25980	4.5	+
See the measurement report 2 for the individual results of each test sample.						

Samples and summary of the test results

Type:	Welding screen, WS red 333, 3mm					
Test report:	11243-ECS-23					
Number of delivered samples:	Three sheets of about 140 * 210 mm ²					
Number of test samples:	5 samples cut out of the sheets					
Test sequence	Requirement	Tests				Samples 23124-17 to -21
		according to				
		EN	Clause	EN	Clause	
1	Marking	25980	5			n.a.
2	Information delivered by the manufacturer / applicant	25980	6			n.a.
3	General requirements, quality of surface and material	25980	4.1	25980	4.1	+
4	Luminous transmittance	25980	4.2	167	6	+
5	Spectral transmittance in UV-range	25980	4.2	167	6	+
6	Hazard level / risk factor	25980	4.2	25980	4.2	+
7	Luminous reflectance, diffuse	25980	4.3	167	6	+
8	Luminous reflectance, specular	25980	4.3	167	6	+
9	Spectral reflectance in UV-range, diffuse	25980	4.3	167	6	+
10	Spectral reflectance in UV-range, specular	25980	4.3	167	6	-
11	Resistance to ignition	25980	4.5	25980	4.5	+
See the measurement report 3 for the individual results of each test sample.						

Samples and summary of the test results

Type: Welding screen, WS red 333, 4mm						
Test report: 11244-ECS-23						
Number of delivered samples: Three sheets of about 140 * 210 mm ²						
Number of test samples: 5 samples cut out of the sheets						
Test sequence	Requirement	Tests				Samples 23124-22 to -26
		according to				
		EN	Clause	EN	Clause	
1	Marking	25980	5			n.a.
2	Information delivered by the manufacturer / applicant	25980	6			n.a.
3	General requirements, quality of surface and material	25980	4.1	25980	4.1	+
4	Luminous transmittance	25980	4.2	167	6	+
5	Spectral transmittance in UV-range	25980	4.2	167	6	+
6	Hazard level / risk factor	25980	4.2	25980	4.2	+
7	Luminous reflectance, diffuse	25980	4.3	167	6	+
8	Luminous reflectance, specular	25980	4.3	167	6	+
9	Spectral reflectance in UV-range, diffuse	25980	4.3	167	6	+
10	Spectral reflectance in UV-range, specular	25980	4.3	167	6	-
11	Resistance to ignition	25980	4.5	25980	4.5	+
See the measurement report 4 for the individual results of each test sample.						

Samples and summary of the test results

Type:	Welding screen, WS bronze 888, 3mm					
Test report:	11245-ECS-23					
Number of delivered samples:	Three sheets of about 140 * 210 mm ²					
Number of test samples:	5 samples cut out of the sheets					
Test sequence	Requirement	Tests				Samples 23124-27 to -31
		according to				
		EN	Clause	EN	Clause	
1	Marking	25980	5			n.a.
2	Information delivered by the manufacturer / applicant	25980	6			n.a.
3	General requirements, quality of surface and material	25980	4.1	25980	4.1	+
4	Luminous transmittance	25980	4.2	167	6	+
5	Spectral transmittance in UV-range	25980	4.2	167	6	+
6	Hazard level / risk factor	25980	4.2	25980	4.2	+
7	Luminous reflectance, diffuse	25980	4.3	167	6	+
8	Luminous reflectance, specular	25980	4.3	167	6	+
9	Spectral reflectance in UV-range, diffuse	25980	4.3	167	6	+
10	Spectral reflectance in UV-range, specular	25980	4.3	167	6	-
11	Resistance to ignition	25980	4.5	25980	4.5	+
See the measurement report 5 for the individual results of each test sample.						

Samples and summary of the test results

Type:	Welding screen, WS bronze 888, 4mm					
Test report:	11246-ECS-23					
Number of delivered samples:	Three sheets of about 140 * 210 mm ²					
Number of test samples:	5 samples cut out of the sheets					
Test sequence	Requirement	Tests				Samples 23124-32 to -36
		according to				
		EN	Clause	EN	Clause	
1	Marking	25980	5			n.a.
2	Information delivered by the manufacturer / applicant	25980	6			n.a.
3	General requirements, quality of surface and material	25980	4.1	25980	4.1	+
4	Luminous transmittance	25980	4.2	167	6	+
5	Spectral transmittance in UV-range	25980	4.2	167	6	+
6	Hazard level / risk factor	25980	4.2	25980	4.2	+
7	Luminous reflectance, diffuse	25980	4.3	167	6	+
8	Luminous reflectance, specular	25980	4.3	167	6	+
9	Spectral reflectance in UV-range, diffuse	25980	4.3	167	6	+
10	Spectral reflectance in UV-range, specular	25980	4.3	167	6	-
11	Resistance to ignition	25980	4.5	25980	4.5	+
See the measurement report 6 for the individual results of each test sample.						