

Test Report

No. 1244-PZA-20 Part 2
Rev. 0

Contact person: Arafat Rahman

phone: +49 911 655-3036
fax: +49 911 655-3033
e-mail: arafat.rahman@dincertco.de

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Customer

Mykita GmbH
Ritterstr. 9
10969 Berlin

Test report contains	Main part and 1 annex
Number of pages	6
Product	Sunglare filter for industrial use
Arrival of samples	2020-05-25 + 2020-06-03
Period of testing	2020-06-07 to 2020-09-10
Reference standard	ANSI/ISEA Z87.1-2020
Remarks	None

This test report relates to the mentioned test samples. Without the permission of the DIN CERTCO test centre Nürnberg this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any certification mark.

Nürnberg, 2020-09-17

Compiled by:



Arafat Rahman, M. Sc.
- Test Engineer -

Reviewed by:



Dr. Andreas Winbauer
- Head of Testing Laboratory -



Test objects, tests and results


Based on the tables as written in the standard ANSI/ISEA Z87.1, the main part assigns the test samples to the named tests. Each individual test result is documented in the annexes according to the named standards.

Signs and symbols:

- + meet the requirements
- **do not meet the requirements**
- / not tested or not applicable
- Ab interruption of the testing sequence

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

Samples and summary of all test results

Type:	Sunglare filter for industrial use, type "MYLON GUARD ONE"					
Test mark:	12442-PZA-20					
Number of delivered parts: 24			Number of test samples: 7			
						
Test- sequence	Requirements	According to		According to		Sample 0244-1, 0244-2, 0244-15 to 0244-18
		ANSI	Clause	ANSI	Clause	
1	Instructions	Z87.1	10	Z87.1	10	+
2	Description of the product and physical requirements	Z87.1	5.2	Z87.1	5.2	+
3	Optical quality	Z87.1	5.1.1	Z87.1	9.1	+
4	Transmittance	Z87.1	7.2.2.1	Z87.1	9.2	+
5	Variations in luminous transmittance	Z87.1	7.2.2.1.3	Z87.1	9.2	+
6	Haze	Z87.1	5.1.3	Z87.1	9.3	+
7	Refractive power, astigmatism, and resolving power	Z87.1	5.1.4	Z87.1	9.4	+
8	Prismatic power	Z87.1	5.1.4	Z87.1	9.5	+
9	Drop ball impact resistance	Z87.1	5.2.1	Z87.1	9.6	+
10	Ignition	Z87.1	5.2.2	Z87.1	9.7	+
11	Minimum coverage area	Z87.1	5.2.4	Z87.1	5.2.4	+
Individual results of each test sample see annex 1						

Marking:

Oculars	Keine
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ANNEX 1

Type:	Sunglare filter for industrial use, type "MYLON GUARD ONE"
Test mark:	12442-PZA-20

Description of the type

Condition of the test item at delivery	Undamaged
Oculars:	Material: Plastics Colour: Grey Centre thickness: 1.6 mm Dimension: 151 mm x 70 mm
Instructions:	Available and complete
Physical Requirements:	Protectors are free from projections, sharp edges or other defects, which are likely to cause discomfort or injury during use.
Minimum Coverage Area:	Fulfill the requirements

Optical quality test, haze, refractive power, astigmatism, resolving power, prism and prism imbalance

Test↓	Sample →		0244-1
Optical quality			+
Haze	R	%	0.92
	L		0.86
Refractive Power	R	D	-0.03
	L		-0.02
Astigmatism	R	D	0.00
	L		0.01
Resolving power	R		+
	L		+
Prism imbalance horizontal		Δ	0.20 Base out
Prism imbalance vertical		Δ	0.03
Prism	R	Δ	0.05
	L		0.15

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Transmittance and variations in luminous transmittance

Test↓	Sample →	0244-2			
		R	L	Thinnest thickness	Frame
Luminous transmittance τ_{v1} based on CIE source A	%	23.8	25.1	28.1	0.3
Spectral transmittance $\tau(\lambda)$					
UVB or erythematous zone 280 nm $\leq \lambda \leq$ 315 nm	%	$\leq 1\%$	$\leq 1\%$	$\leq 1\%$	$\leq 1\%$
UVA or near zone 315 nm $\leq \lambda \leq$ 380 nm	%	$\leq 0.5 \cdot \tau_{v1}$	$\leq 0.5 \cdot \tau_{v1}$	$\leq 0.5 \cdot \tau_{v1}$	$\leq 0.5 \cdot \tau_{v1}$
475 nm $\leq \lambda \leq$ 650 nm	%	$\geq 0.2 \cdot \tau_{v1}$	$\geq 0.2 \cdot \tau_{v1}$	$\geq 0.2 \cdot \tau_{v1}$	$\geq 0.2 \cdot \tau_{v1}$
Traffic signal transmittance	%	Red ≥ 8 Yellow ≥ 6 Green ≥ 6	Red ≥ 8 Yellow ≥ 6 Green ≥ 6	Red ≥ 8 Yellow ≥ 6 Green ≥ 6	/
Chromaticity coordinates of average daylight (D65)		x=0.3153 y=0.3384	x=0.3165 y=0.3389	x=0.3170 y=0.3384	/
Chromaticity coordinates of yellow region		x=0.5760 y=0.4227	x=0.5765 y=0.4222	x=0.5772 y=0.4216	/
Chromaticity coordinates of green region		x=0.2071 y=0.4075	x=0.2076 y=0.4081	x=0.2077 y=0.4076	/
Scale number		L2.5	L2.5	L2.5	/*
Variations in luminous transmittance	T _L / T _R	1.1			

*Fulfills the requirement of the ocular

Drop ball impact resistance

Sample	Impact point	Comments
0244-15	1	+
0244-16	2	+
0244-17	1	+
0244-18	2	+

Impact point 1: left eye frontal
Impact point 2: right eye frontal

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Ignition

Test↓	Sample →	
Ignition		0244-18 +