

Test Report

No. 1400-PZA-25
Rev. 0

Contact person: Leon Beisig

phone: +49 911 655-3017
e-mail: leon.beisig@dincertco.de

Accredited by the Deutsche
Akkreditierungsstelle GmbH (DAkkS)
D-PL-11125-01

Customer

Wenzhou Xinsheng Paper Products Co.,Ltd
No. 5-6 Qianchen Road, Longgang City
325699 Wenzhou City, Zhejiang Province
CHINA

Test report contains	Main part and 1 annex
Number of pages	8
Product	Filters for direct observation of the sun
Arrival of samples	2025-11-19 2 nd delivery: 2026-01-27
Period of testing	2025-12-05 to 2026-02-19
Reference standard	DIN EN ISO 12312-2 : 2015-11
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, 2026-03-25

Compiled by:


Leon Beisig
- Test Assistant -



Reviewed by:


Nikita Beketov, M. Sc.
- Test Engineer -



Test objects, tests and results

Based on the tables as written in the standard DIN EN ISO 12312-2, the main part assigns the test samples to the named tests. Each individual test result is documented in the annex 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

The uncertainty of optical measurements corresponds to the required one in DIN EN ISO 12311.

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

Detailed information about the measurement uncertainties are included in the separate document – overview of measurement uncertainties.pdf.

Unless otherwise specified, the ambient temperature for testing was maintained at $(23 \pm 5) ^\circ\text{C}$ and the relative humidity at $(50 \pm 20) \%$.



Samples and summary of all test results

Type:	Filters for direct observation of the sun, type “Solar Eclipse Glasses”					
Test mark:	14001-PZA-25					
Number of delivered parts: 36			Number of test samples: 2			
						
Test- sequence	Requirements			Tests		Sample 5400-1 to 5400-2
		DIN EN ISO	According to Clause	DIN EN ISO	According to Clause	
1	Information and marking	/*	/*	/*	/*	+
2	Information and labelling	12312-2	5	12312-2	5	+
3	Mounting	12312-2	4.3	12312-2	4.3	+
4	Material and surface quality	12312-2	4.2	12312-2	4.2	+
5	Transmittance	12312-2	4.1	12311	7	+
Individual results of each test sample see annex 1						

* Requirements and test according to PPE-Regulation (EU) 2016/425.

2nd delivery from 2026-01-27:

Type:	Filters for direct observation of the sun, type “Solar Eclipse Glasses”					
Test mark:	14001-PZA-25					
Number of delivered parts: 30			Number of test samples: 2			
						
Test- sequence	Requirements		Tests		Sample 5400-3 to 5400-4	
		According to DIN EN ISO	Clause	According to DIN EN ISO		Clause
1	Mounting	12312-2	4.3	12312-2	4.3	+
2	Material and surface quality	12312-2	4.2	12312-2	4.2	+
3	Transmittance	12312-2	4.1	12311	7	+
Individual results of each test sample see annex 1						

* Requirements and test according to PPE-Regulation (EU) 2016/425.

ANNEX 1

Type:	Filters for direct observation of the sun, type "Solar Eclipse Glasses"
Test mark:	14001-PZA-25

Description of the type

Condition of the test item at delivery:	Undamaged	
Frame:	Marking:	User manual
	Material:	Paper
	Colour:	Multi coloured
Oculars:	Material:	Plastics
	Colour:	Inside: black Outside: silver mirrored
	Centre thickness:	0.09 mm
Test device for centre thickness: No. 9022813		

Information and labeling

Test ↓	Sample →	5400-1
Information and labelling (DIN EN ISO 12312-2):		Available and complete
Information ((EU) 2016/425):		Available and complete
Marking ((EU) 2016/425):		Available and complete

Type:	Filters for direct observation of the sun, type "Solar Eclipse Glasses"
Test mark:	14001-PZA-25

Mounting, material and surface quality

Test ↓		Sample →		5400-1			
Mounting	General requirements		+				
	overall dimensions		width:	143 mm	depth:	37 mm	
	dimensions of cut away for crest of the nose		height:	14 mm	width	29 mm	
	Material quality		+				
Material and surface quality			+				
Test device for dimensions: No. 902763							

Transmittance

Test ↓	Sample →	5400-2 right	5400-2 left
Luminous transmittance τ_{V1} based on CIE source D65	%	0.0083	0.0015
Maximum value of solar UVB-transmittance $280 \text{ nm} \leq \tau_{\text{SUVB}} \leq 315 \text{ nm}$		$\leq \tau_{V1}$	$\leq \tau_{V1}$
Maximum value of solar UVA-transmittance $315 \text{ nm} \leq \tau_{\text{SUVA}} \leq 380 \text{ nm}$		$\leq \tau_{V1}$	$\leq \tau_{V1}$
Maximum value of solar IR transmittance $780 \text{ nm} \leq \tau_{\text{SIR}} \leq 2000 \text{ nm}$		$\leq 3\%$	$\leq 3\%$
Test device for transmittance: No. 9022782			

Type:	Filters for direct observation of the sun, type "Solar Eclipse Glasses"
Test mark:	14001-PZA-25

2nd derelivery from 2026-01-27:

Description of the type

Condition of the test item at delivery:	Undamaged	
Frame:	Marking:	User manual
	Material:	Paper
	Colour:	Multi coloured
Oculars:	Material:	Plastics
	Colour:	Inside: black Outside: silver mirrored
	Centre thickness:	0.13 mm
Test device for centre thickness: No. 9022813		

Mounting, material and surface quality

Test ↓		Sample →	5400-3			
Mounting	General requirements		+			
	overall dimensions		width:	144 mm	depth:	37 mm
	dimensions of cut away for crest of the nose		height:	< 15 mm	width	33 mm
	Material quality		+			
Material and surface quality			+			
Test device for dimensions: No. 9022805						

Type:	Filters for direct observation of the sun, type "Solar Eclipse Glasses"
Test mark:	14001-PZA-25

Transmittance

Test ↓	Sample →	5400-4 right	5400-4 left
Luminous transmittance τ_{V1} based on CIE source D65	%	0.00014	0.00015
Maximum value of solar UVB-transmittance $280 \text{ nm} \leq \tau_{\text{SUVB}} \leq 315 \text{ nm}$		$\leq \tau_{V1}$	$\leq \tau_{V1}$
Maximum value of solar UVA-transmittance $315 \text{ nm} \leq \tau_{\text{SUVA}} \leq 380 \text{ nm}$		$\leq \tau_{V1}$	$\leq \tau_{V1}$
Maximum value of solar IR transmittance $780 \text{ nm} \leq \tau_{\text{SIR}} \leq 2000 \text{ nm}$		$\leq 3\%$	$\leq 3\%$
Uniformity of luminous transmittance	%	9.0	1.9
Test device for transmittance: No. 9022782 Test device for uniformity in transmittance: No. 9022815			

End of test report