

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YAN0075/2018

Page : 1 of 7

Date : DEC. 05, 2018

SHANGHAI JHEYEWEAR CO.,LTD

806, 3388 Gongxinroad, Jingan District, 200436, China

The following merchandise was submitted and identified by the applicant as:

Product Description: RPET SUNGLASSES

Reference No.: SHHL1811064519SG

We have tested the submitted sample(s) as requested and the following results were obtained:

Test Requested:

1. EN ISO 12312-1:2013+A1:2015 Eye and face protection — Sunglasses and related eyewear — Part 1:Sunglasses for general use
2. UV 400 Transmittance (The transmittance between 280nm and 400nm)

Test Method & Result: --- See following sheet(s) ---

Date of Receipt: NOV. 22, 2018

Testing Period: NOV. 22 ~ DEC. 04, 2018

--- See Next Page ---

Laboratory address:
61, Kai-Fa Road, Nanzih Export Processing Zone, 81170, Kaohsiung, Taiwan

Signed for and on behalf of
SGS Taiwan Ltd.


Owen Cheng
Manager



TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YAN0075/2018

Page : 2 of 7

Test Method & Result

1. EN ISO 12312-1:2013+A1:2015 Eye and face protection — Sunglasses and related eyewear — Part 1: Sunglasses for general use

Clause

4 Construction and materials

4.1 Construction

Result

Pass

Finding

Sample 1 was assessed. None of the defects listed in the Standard was appeared.

4.2 Filter material and surface quality

Pass

Finding

Sample 1 was assessed. None of the defects listed in the Standard was appeared.

4.3 Physiological compatibility

Sunglasses shall be designed and manufactured in such a way that when used under the conditions and for the purposes intended, they will not compromise the health and safety of the wearer. The risks posed by substances leaking from the device that may come into prolonged contact with the skin shall be reduced by the manufacturer to below any regulatory limit. Special attention shall be given to substances which are allergenic, carcinogenic, mutagenic or toxic to reproduction.

N/E

5 Transmittance

5.2 Transmittance and filter categories

Category 2

Finding

Sample	Filter Category	Range	Requirement	Test Value	
				Left Ocular	Right Ocular
1	2	380 ~ 780 nm Luminous Transmittance (Tv)	18 ~ 43 %	21.09 %	22.13 %
		280 ~ 315 nm TSUVB	< 1.0 %	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)
		315 ~ 380 nm TSUVA	< 0.5 Tv	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)

--- See Next Page ---

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YAN0075/2018

Page : 3 of 7

Test Result

Clause

5.3 General transmittance requirements

5.3.1 Uniformity of luminous transmittance

Result

Pass

Finding

Sample	Filter Category	Test Item	Requirement	Test Value	
				Left Ocular	Right Ocular
1	2	Variation within filter	< 10 %	0.68 %	0.11 %
		Difference between filter	≤ 15 %	4.70 %	

5.3.2 Requirements for road use and driving

5.3.2.1 General

Filters suitable for road use and driving shall be of categories 0, 1, 2 or 3 and shall additionally meet the following two requirements.

(a) Spectral transmittance

Pass

Finding

Sample	Filter Category	Range	Requirement (Minimum Spectral Transmittance)	Test Value	
				Left Ocular	Right Ocular
1	2	475 ~ 650 nm	≥ 0.2 Tv	0.86 Tv (18.22 %)	0.87 Tv (19.19 %)

(b) Detection of signal lights

Finding

Sample	Filter Category	The Relative Visual Attenuation Quotient Q	Requirement	Test Value	
				Left Ocular	Right Ocular
1	2	Red	≥ 0.80	1.00	1.00
		Yellow	≥ 0.60	0.97	0.98
		Green	≥ 0.60	1.02	1.02
		Blue	≥ 0.60	1.05	1.05

5.3.2.2 Driving in twilight or at night

See Note 1*

Note 1*: Sunglass filters with a luminous transmittance of less than 75% shall not be used for road use and driving in twilight or at night.

--- See Next Page ---

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YAN0075/2018

Page : 4 of 7

Test Result

Clause

5.3.3 Wide angle scattering

Result

Pass

Finding

Sample	Requirement	Test Value	
		Left Ocular	Right Ocular
1	$\leq 3 \%$	2.1 %	1.8 %

6 Refractive power

6.1 Spherical and astigmatic power

Pass

Finding

Sample	Requirement	Spherical Power (m^{-1})		Astigmatic Power (m^{-1})	
		± 0.12		≤ 0.12	
2	Test Value	Left Ocular	Right Ocular	Left Ocular	Right Ocular
		-0.02	-0.03	0.00	0.00

Sample	The Spherical Powers Difference Between Right And Left Filters (m^{-1})	Test Value (m^{-1})
2	≤ 0.18	0.01

6.2 Local variations in refractive power

N/A

6.3 Prism imbalance (relative prism error)

Pass

Finding

Sample	Requirement	Prism Imbalance		
		Horizontal (cm/m)		Vertical (cm/m)
		Base Out	Base In	
2	Test Value	< 1.00	< 0.25	< 0.25
		--	0.05	0.00

--- See Next Page ---

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YAN0075/2018

Page : 5 of 7

Test Result

Clause

7 Robustness

Result

7.1 Minimum robustness of filters

Pass

Finding

Sample 3 was assessed. None of the defects listed in the Standard was appeared on both left and right oculars.

7.2 Frame deformation and retention of filters

Pass

Finding

Sample 4 was assessed. None of the defects listed in the Standard was appeared.

8 Resistance to solar radiation

Pass

Finding

Sample	Filter Category	Permitted Relative Change In Luminous Transmittance After Test	Test Value	
			Left Ocular	Right Ocular
1	2	± 8 %	0.71 %	-1.45 %

Following additional requirements shall be complied with also after the irradiation process.

Finding

a. Wide angle scattering

Pass

Sample	Requirement	Test Value	
		Left Ocular	Right Ocular
1	≤ 3 %	2.6 %	2.1 %

b. Requirements For The Ultraviolet Spectral Range For Initial Tv (Luminous Transmittance)

Pass

Sample	Filter Category	Range	Requirement	Test Value	
				Left Ocular	Right Ocular
1	2	280 ~ 315 nm TSUVB	< 1 %	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)
		315 ~ 380 nm TSUVA	< 0.5 Tv	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)

--- See Next Page ---

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YAN0075/2018

Page : 6 of 7

Test Result

Clause

9 Resistance to ignition

Result

Pass

Finding

Sample 3 was assessed. Sample was not ignited or continued to glow after removal of the steel rod.

11 Protective requirements

11.1 Coverage area

Pass

Finding

Sample	Requirement	Test Value
3	Horizontal diameter \geq 40 mm	> 40 mm
	Vertical diameter \geq 28 mm	> 28 mm
	The centres of which are separated by 64 mm	Pass

12 Information and labelling

No Claim

2. UV 400 Transmittance (The transmittance between 280nm and 400nm)

See Finding

Finding

Sample	Test Item	Requirement	Test Value	
			Left Ocular	Right Ocular
1	UV 400	In the case where it is claimed that a filter has less than x % UV transmittance, the solar UV transmittance of the filter shall not exceed (x + 0.5) % by referring to clause 5.3.5.2.3 of EN ISO 12312-1:2013+A1:2015.	0.01 %	0.02 %

Note *. UV transmittance x% of UV400 is claimed as 0.00% by applicant.

- Remark:
1. The lenses are uniformly tinted filters claimed by applicant.
 2. The sunglasses with inter-papillary distance 64 mm are claimed by applicant.
 3. Samples were provided by applicant and samples were randomly selected to be assessed.
 4. Only applicable clauses were shown
 5. N/E = Not Evaluated
 6. N/A = Not applicable

--- See Next Page ---

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YAN0075/2018

Page : 7 of 7

– Picture(s) –



Photo "A" : Appearance of sample (front view)



Photo "B" : Appearance of sample (side view)

--- End of Report ---