

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YA20058/2019

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Date : MAR. 07, 2019

SLP PENTERPRISES LLC

60 THOREAU STREET, CONCORD, MA, 01742, U.S.A.

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

Product Description: KIDS SUNGLASSES

Style/Item No.: SURF

Country of Origin: TAIWAN

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

Test Requested: EN ISO 12312-1:2013+A1:2015 Eye and face protection — Sunglasses and related eyewear — Part 1: Sunglasses for general use
Clause 4.1, 4.2, 5.2, 5.3, 6.1, 6.2, 6.3, 7.1, 8, 9

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

Date of Receipt: FEB. 23, 2019

Testing Period: FEB. 23 ~ MAR. 07, 2019

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**Signed for and on behalf of
SGS Taiwan Ltd.**

Owen Cheng

Owen Cheng
Manager



Laboratory address:

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Test Method & Result**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 was assessed. None of the defects listed in the Standard was appeared.

4.2 Filter material and surface quality

Pass**Finding**

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

5 Transmittance

5.2 Transmittance and filter categories

Category 3**Finding**

Sample	Filter Category	Range	Requirement	Test Value	
				Left Ocular	Right Ocular
1	3	380 ~ 780 nm Luminous Transmittance (Tv)	8 ~ 18 %	13.73 %	12.00 %
		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 %)

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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	3	Variation within filter	< 10 %	2.39 %	0.72 %
		Difference between filter	≤ 15 %	12.56 %	

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.

Pass

(a) Spectral transmittance

Finding

Sample	Filter Category	Range	Requirement (Minimum Spectral Transmittance)	Test Value	
				Left Ocular	Right Ocular
1	3	475 ~ 650 nm	≥ 0.2 Tv	0.89 Tv (12.20 %)	0.90 Tv (10.76 %)

(b) Detection of signal lights

Finding

Sample	Filter Category	The Relative Visual Attenuation Quotient Q	Requirement	Test Value	
				Left Ocular	Right Ocular
1	3	Red	≥ 0.80	1.17	1.19
		Yellow	≥ 0.60	1.05	1.06
		Green	≥ 0.60	0.97	0.97
		Blue	≥ 0.60	0.97	0.96

5.3.2.2 Driving in twilight or at night

See Note *

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

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5.3.3 Wide angle scattering

Result

Pass

Finding

Sample	Requirement	Test Value	
		Left Ocular	Right Ocular
1	$\leq 3 \%$	1.9 %	1.9 %

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
		-0.04	-0.02	0.06	0.06

Sample	The Spherical Powers Difference Between Right And Left Filters (m^{-1})	Test Value (m^{-1})
2	≤ 0.18	0.02

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	
		< 1.00	< 0.25	< 0.25
2	Test Value	0.15	--	0.00

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7 Robustness

7.1 Minimum robustness of filters

ResultPass**Finding**

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

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	3	$\pm 10 \%$	1.17 %	2.42 %

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	$\leq 3 \%$	1.7 %	1.9 %

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	3	280 ~ 315 nm TSUVB	$< 1 \%$	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)
		315 ~ 380 nm TSUVA	$< 0.5 \text{ Tv}$	0.00 Tv (0.01 %)	0.00 Tv (0.01 %)

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9 Resistance to ignition

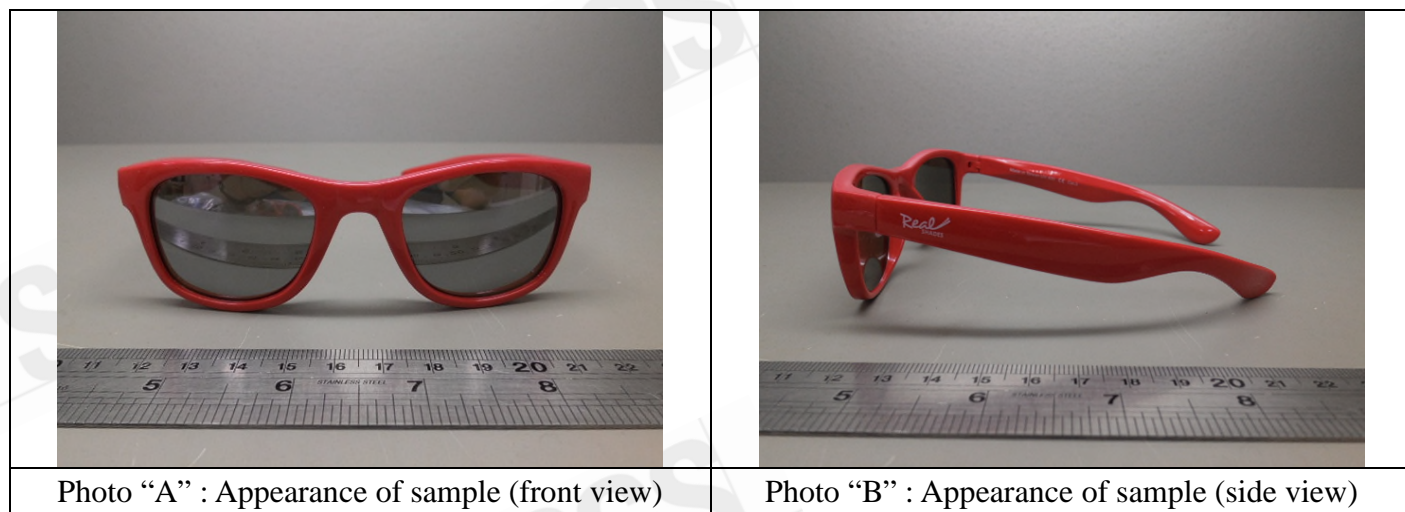
Result

Pass

Finding

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

– Picture(s) –



--- End of Report ---