

TEST REPORT

Mechanical & Hardgoods Laboratory

Report No. : YA30044/2019

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Date : MAR. 29, 2019

Pro-Sight Optical Co., LTD

NO.30, Ln.9, Fude St., Luzhu Dist., Kaohsiung 82146, TAIWAN

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

Product Description: Decentered 8C*90 mm Clear to Gray

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

Test Requested: EN 166:2001/ BS EN 166:2002 Personal eye-protection – Specifications
Clause 7.1.2.1/ 7.1.2.2.2/ 7.1.2.2.3/ 7.1.2.3/ 7.1.3/ 7.1.5.1/ 7.1.4.2.1/ 7.1.7

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

Date of Receipt: MAR. 15, 2019

Testing Period: MAR. 15 ~ 29, 2019

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Signed for and on behalf of
SGS Taiwan Ltd.

Owen Cheng
Owen Cheng
Manager



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

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Test Method & Result:

EN 166:2001/ BS EN 166:2002 Personal eye-protection – Specifications

Clause

7.1.2 Optical requirements

7.1.2.1 Spherical, astigmatic and prismatic refractive powers

7.1.2.1.1 Unmounted oculars covering one eye

Result

Optical Class1

Finding

Sample	Requirement	Optical Class	Spherical Power (D1+D2)/2 m ⁻¹	Astigmatic Power D1-D2 m ⁻¹	Prismatic refractive Power cm/m
		1	± 0.06	Max. 0.06	Max. 0.12
01	Test Value	1	-0.02	0.02	0.06

7.1.2.2 Transmittance

7.1.2.2.2 Oculars with filtering action (filters) and housings for oculars with filtering action. See 7.2.1.2

7.1.2.2.3 Variations in transmittance

7.1.2.2.3.1 Oculars without corrective effect

Pass

Finding

Sample	01	Requirement
Luminous Transmittance	17.8 % ~ 100 %	Permissible Relative Variation
Ocular	P1	
P1	2.19 %	± 5 %

7.1.2.3 Diffusion of light

Pass

Finding

Sample	Requirement	Test Value [(cd/m ²)/lx]
01	Reduced Luminance Factor ≤ 0.50 [(cd/m ²)/lx]	0.15

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7.1.3 Quality of material and surface

Result

Pass

Finding

Samples 01 were assessed. The samples were free from bubbles, scratches, inclusions, dull spots, pitting, mould marks, notches, reinforced points, specks, beads, water specks, pocking, gas inclusions, splintering, cracks, polishing defects or undulations.

7.1.4.2 Increased robustness

7.1.4.2.1 Unmounted oculars

Pass

Finding

Sample 01 was assessed. None of the defects listed in the Standard was appeared.

7.1.5 Resistance to ageing

7.1.5.1 Stability at an elevated temperature

Pass

Finding

Samples 01 were assessed. The samples tested showed no apparent deformation.

7.1.7 Resistance to ignition

Pass

Finding

Samples 01 were assessed. For each of the samples tested, no part of the eye-protectors ignites or continues to glow after removal of the steel rod.

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Test Result

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7.2 Particular requirements

7.2.1 Protection against optical radiation

7.2.1.4 Sunglare filter for industrial use – see EN 172

Result

EN172:1994+A1:2000+A2:2001 – Personal eye protection – Sunglare filters for industrial use

4.1 Permissible transmittance and scale numbers

Scale number

4.1.1 Filters with code number 5

5-1,1

Finding

Scale number <u>5-1,1</u>	Range of luminous transmittance τ_v	
	From (%)	To over (%)
Requirement	100 %	80 %
Sample	Test Value	
01	84.69 %	

Additional requirements	Sample	Requirement	Test Value
a)Maximum value of spectral transmittance τ_v From 280nm to 315nm	01	< 0.1 Tv	0.01 % (0.00 Tv)
b)Maximum value of spectral transmittance τ_v Over 315nm to 350nm	01	< Tv	0.01 % (0.00 Tv)
c)Maximum mean value of spectral transmittance τ_v From 315nm to 380nm	01	< Tv	0.01 % (0.00 Tv)

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Test Result

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4.2 General transmittance requirement

4.2.1 Spectral transmittance

Result

Pass

Finding

Sample	Range	Requirement (Minimum spectral transmittance)	Test Value
01	500 ~ 650 nm	$\geq 0.2 T_v$	0.98 T_v (83.05 %)

4.2.3 Recognition of signal lights

Pass

Finding

Sample	The relative visual attenuation coefficient (Quotient) Q	Requirement	Test Value
01	Red	≥ 0.80	1.01
	Yellow	≥ 0.80	1.00
	Green	≥ 0.80	1.00
	Blue	≥ 0.80	1.01

4.3.1 Photochromic filters

Pass

Finding

Sample	Requirement	Test Value
01	$T_v0 (84.69 \%) / T_v1 (28.23\%) \geq 1.25$	3

Remark: Only applicable clauses were shown.

--- End of EN 172---

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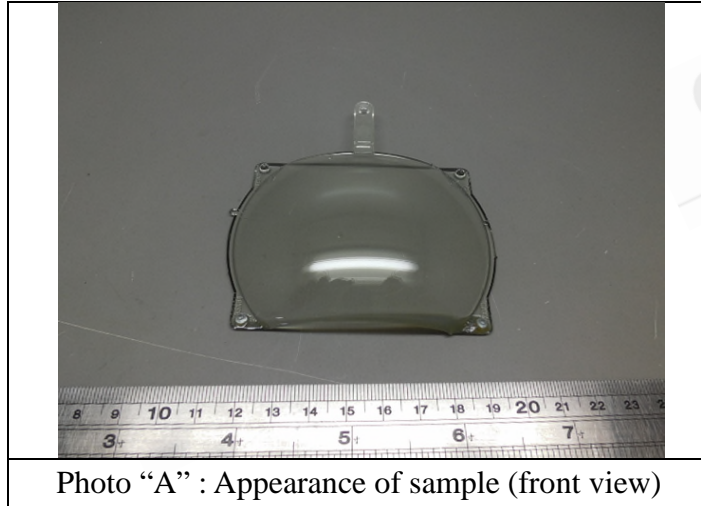
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