

TEST REPORT

Test Report # 17E-000614 (R1) Date of Report Issue: March 9, 2017
 Date of Sample Received: February 27, 2017 Pages: Page 1 of 6

This report is to supersede Report No. 17E - 000614 dated on 7 March 2017

CLIENT INFORMATION:

Company: GSM Sales LLC
 Recipient: -
 Recipient address/country: 4110 W 47th Ter Roeland Park, KS 66205



SAMPLE INFORMATION:

Description: **Filters for direct observation of the sun**
 Buyer / Department: -
 Brand name: -
 Style Name /Item code: Solar Eclipse Glasses
 EAN/SKU/code-number: WGD007
 Other reference/PO number: -
 Batch number / other info.: 17A-000346
 Factory/Supplier/Vendor: -
 Mechanical Strength: -
 UV protection: -
 Anti-reflection treated: -
 Other claimed functions: -
 Nos of samples provided: 5 pcs

Front material:	Paper
Temple material:	Paper
Tip material:	-
Lens color description:	Solid Grey
Category Number:	-
Size for:	Adult
Sun-Lens type:	Non-polarize
Blue-light transmittance:	-
Anti-Abrasion:	-
Country of Origin:	China
Test period: 6Mar2017 to	6Mar2017

OVERALL RESULT:

 **PASS**

Refer to page 2 for test result summary and appropriate notes.

For and on behalf of
 ANSECO GROUP (HK) LIMITED – AI-ETIC



Ms. Davio Tsang
 General Manager

TEST RESULTS SUMMARY:

At the request of the client, the following tests were conducted:

CONCLUSION	TEST(S) CONDUCTED
PASS	BS EN ISO 12312.2-2015 Eye and face protection – Sunglasses and related eyewear. Part 1: Filter for direct observation of the sun Including: - Clause 4.1 Transmittance and uniformity - Clause 4.2 Material and surface quality - Clause 4.3 Mounting (if applicable) Excluding: - Clause 5 Marking and information Material’s Physiological compatibility

*Note: N/A = not applicable; NR = not required; L = left, R = right. - = no information given.
 Transmittance properties measured at BOXED CENTERS.*

DETAILED RESULTS:

Test Sequence and Name	Reference to ISO 12312.2	Requirements	Findings	Result		
1. Material and Surface Quality	Clause 4.2.1 and test method 4.2.2	Except in a marginal area 5 mm wide, filters shall be free from defects likely to impair vision in use, such as bubbles, scratches, inclusions, dull spots, pitting, scouring, pocking, scaling, and undulations.	Visual inspection using magnifying lens of 4× to 10× magnification on light panel	PASS		
			L		No defect impair vision	
		R	No defect impair vision			
		Metal coated filter materials shall not exhibit more than one pinhole defect not greater than 200 μm in average diameter within any 5 mm diameter circular zone.	Metal coated lenses		L: N/A R: N/A	
2. Transmittance requirements	Clause 4.1.1 and Table 1 (test method refer to ISO12311)	Transmittance requirements for filters for the direct observation of the sun: Maximum luminous transmittance (τ_v) 0,003 2 %	Luminous transmittance (Tv) 380-780nm (in %)	PASS		
			L		Within 0.0032 to 0.000061 range	
		Minimum luminous transmittance (τ_v) 0,000 061 %	R		Within 0.0032 to 0.000061 range	
		Maximum solar UVB transmittance (τ_{SUVB}) Tv	Tmax UVB (280-315nm):		PASS	
			L			0.000079%
		R	0.000144%			
		Maximum solar UVA transmittance (τ_{SUVA}) Tv	Tmax UVA (315-380nm):		PASS	
			L			0.000175%
		R	0.000154%			
		Maximum solar infrared transmittance (τ_{SIR}) 3%	TSIR range (780-2000nm)		PASS	
			L			Less than 3%
			R			Less than 3%
3. Uniformity of transmittance	Clause 4.1.2 (test method refers to ISO12311)	The relative difference in the luminous transmittance value between any two points of the filter shall not be greater than 10 % (relative to the higher value).	Relative difference (%)	PASS		
			Left ocular			
			Tv max		0.000229	
			Tv min		0.000228	
			Diff. (%)		Less than 10%	
			Right Ocular			
			Tv max		0.000261	
			Tv min		0.000240	
			Diff. (%)		Less than 10%	

DETAILED RESULTS:

Test Sequence and Name	Reference to ISO 12312.2	Requirements	Findings		Result
4. Mounting requirements	Clause 4.3.1	Filters may be made with or without a mounting.	With mounting or not:	With mounting	PASS
		If mounted, a filter shall be held securely so that it cannot be dislodged by normal handling or by gusts of wind.	Filter retention:	Good	
		Mountings may be handheld or shaped in the form of spectacles to be worn on the face of the user.	Mounting method:	In cardboard paper	
5. Dimension requirements	Clause 4.3.2	The filter(s) shall have overall dimensions NOT less than 115 mm in width and 35 mm in depth in the plane parallel to the facial plane.	Total width of the filter(s):	Over 115mm	PASS
			Total depth of the filter(s)	Over 35mm	
		Spectacle shaped mountings may have a triangular cut-away area to accommodate the crest of the nose, not to exceed 15 mm in apical height and 35 mm width at the base and may have separate filters, one for each eye.	Spectacle shaped:	Yes	
			Nose cut area:	Less than 15 and 35mm	
6. Material Quality	Clause 4.3.3	The filter and mounting shall be free from roughness, sharp edges, projections, or other defects which could cause discomfort or injury during use. No part of the filter or mounting which is in contact with the wearer shall be made of materials which are known to cause any skin irritation.	Roughness, sharp edges or discomfort issues:	Nil	PASS
			Material contact with skin:	Paper	

DETAILED RESULTS:

Test Sequence and Name	Reference to ISO 12312.2	Requirements	Findings		Result
7. Marking requirements	Clause 5	<p>The filter and/or its packaging shall show the following information in the language(s) of the country where the product is to be offered for sale:</p> <p>a) name and address of manufacturer of the product;</p> <p>b) instructions for use in looking at the sun or a solar eclipse;</p> <p>c) warnings that viewing the sun without an appropriate filter can result in permanent eye injury;</p> <p>EXAMPLE "Direct viewing of the sun is dangerous if the proper precautions are not taken. Adequate eye protection specifically designed for viewing the sun is essential and shall be worn so that no direct radiation from the sun can reach the eye other than that passing through the filter."</p> <p>d) warnings that filters that are damaged or separated from their mountings should be discarded;</p> <p>e) advice on storage, cleaning, and maintenance, as appropriate;</p> <p>f) obsolescence deadline or period of obsolescence, as appropriate.</p>	Marking provided	Nil	NR
			a) Mfr information		
			b) instructions for use		
			c) warnings on viewing		
			d) warnings on mounting		
			e) storage, cleaning and maintenance		
			f) deadline		

SAMPLEPHOTO:



-End Report-