

Test Report

SL52415301945301TX

Date: June 17, 2024 Page 1 of 4

CECEP (DAZHOU) NEW MATERIAL CO.,LTD  
GROUPS 6 AND 7, ZHONGFENG VILLAGE, BINLANG TOWNSHIP, HIGH-TECH ZONE, DAZHOU, SICHUAN

The following sample(s) was/were submitted and identified on behalf of the client as:

Sample Description : (A)Highlight polyester Reflective fabric  
Model No.: H02  
Material: Polyester, glass microbeads, acrylic acid, aluminum powder

Sample Color : (A)Silver  
SGS Internal Ref.No. : CQ10054718 4.1~4.2

Proposed Care Instruction : -

Test Performed : Selected test(s) as requested by applicant

Sample Receiving Date : Jun 06, 2024  
Testing Period : Jun 07, 2024 - Jun 17, 2024

Test Result(s) : Unless otherwise stated the results shown in this test report refer only to the sample(s) tested, for further details, please refer to the following page(s).

### High-visibility clothing - Test methods and requirements (EN ISO 20471:2013+A1:2016)

Conclusion	A	Remark
Clause 6.1 Retroreflection for Retroreflective Material	PASS	
Clause 6.2 Retroreflection Under The Influence Of Rainfall	PASS	
Clause 6.2 Retroreflection After Washing	PASS	

Remark(s) : PASS=Meet General Requirement

Signed for and on behalf of  
SGS-CSTC Standards Technical Services (Shanghai) Co., Ltd

Sara Guo (Account Executive)



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Test Result

**High-visibility clothing - Test methods and requirements**

EN ISO 20471:2013+A1:2016

**Clause 6.1 Retroreflection for Retroreflective Material**

(EN ISO 20471:2013+A1: 2016 Clause 7.3)

Sample A

**Separate Performance Retroreflective Material**

Entrance Angle	Observation Angle	Measured value (cd/(lx. m <sup>2</sup> ))		Orientation Sensitive	Minimum Requirement (cd/(lx. m <sup>2</sup> ))			Result (Pass/Fail)
		0°	90°		Orientation Sensitive		Non-Orientation Sensitive	
5°	12'	403	397	No	330	247.5	330	Pass
	20'	268	266	No	250	187.5	250	Pass
	1°	45.2	44.1	No	25	18.75	25	Pass
	1°30'	19.5	19.4	No	10	7.5	10	Pass
20°	12'	399	392	No	290	217.5	290	Pass
	20'	267	263	No	200	150	200	Pass
	1°	44.6	43.7	No	15	11.25	15	Pass
	1°30'	19.5	19.1	No	7	5.25	7	Pass
30°	12'	391	379	No	180	135	180	Pass
	20'	261	254	No	170	127.5	170	Pass
	1°	44.6	43.1	No	12	9	12	Pass
	1°30'	18.8	18.2	No	5	3.75	5	Pass
40°	12'	359	345	No	65	48.75	65	Pass
	20'	245	239	No	60	45	60	Pass
	1°	40.4	36.8	No	10	7.5	10	Pass
	1°30'	17.5	17.2	No	4	3	4	Pass

Remark:

- When measured at two rotation angles  $\varepsilon = 0^\circ$  and  $\varepsilon = 90^\circ$ , materials having coefficients of retroreflection that differ by more than 15% are defined as orientation sensitive.
- Orientation-sensitive material shall comply with the minimum requirements for the coefficient of retroreflection stated in Table 4 of EN ISO 20471 at one of the two rotation angles. The coefficient of retroreflection shall be not less than 75% of the values stated in Table 4 (Minimum coefficient of retroreflection for separate performance retroreflective material) at the other rotation angle.



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Table 4 – Minimum coefficient of retroreflection in cd/(lx.m<sup>2</sup>) for separate performance retroreflective material

Observation angle	Entrance angle $\beta_1$ ( $\beta_2 = 0$ )			
	5°	20°	30°	40°
12'	330	290	180	65
20'	250	200	170	60
1°	25	15	12	10
1°30'	10	7	5	4

**Clause 6.2 Retroreflection under the influence of rainfall**  
(EN ISO 20471:2013+A1: 2016 Clause 7.3&7.4.5&Annex C)

**Separate Performance Retroreflective Material**

Entrance Angle	Observation Angle	Measured value (cd/(lx.m <sup>2</sup> ))		Minimum Requirement (cd/(lx.m <sup>2</sup> ))	Result (Pass/Fail)
		0°	90°		
5°	12'	211	209	100	Pass

**Clause 6.2 Retroreflection after Domestic Washing**  
(EN ISO 20471:2013+A1:2016 Clause 7.3&7.5.2)

Sample A

After 25 washes

**Separate Performance Retroreflective Material**

Entrance Angle	Observation Angle	Measured value (cd/(lx.m <sup>2</sup> ))		Orientation Sensitive	Minimum Requirement (cd/(lx.m <sup>2</sup> ))		Result (Pass/Fail)	
		0°	90°		Orientation Sensitive	Non-orientation Sensitive		
5°	12'	304	291	No	100	75	100	Pass

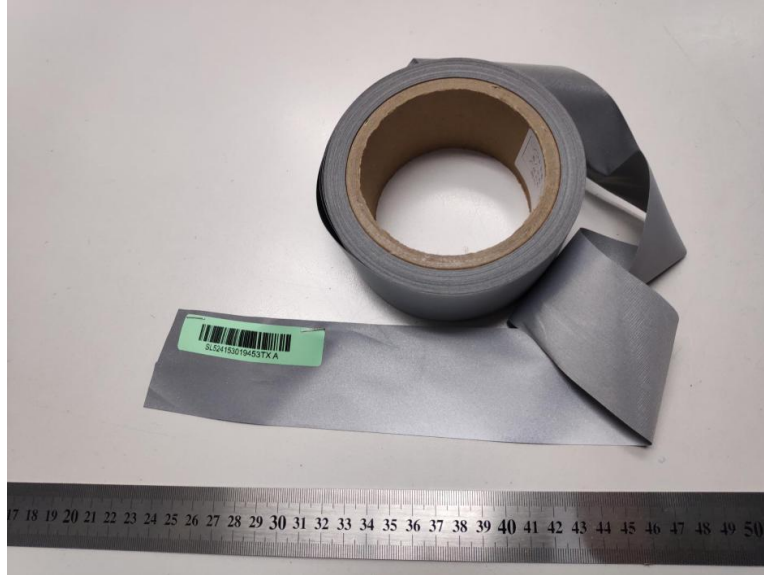
Cleaning procedure: ISO 6330:2021:Using horizontal axis, front-loading type machine; Procedure No.6N, Machine Wash At 60°C; with 2kg total dry mass (Type III (100% Polyester) Ballast+Specimen) and 20±1 g ECE reference detergent 98 without optical brightener, Tumble Dry Low, Not Exceeding 60°C



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### Sample Photo



Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule (w=0) stated in ILAC-G8:09/2019.

\*\*\*End of Report\*\*\*

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