

TEST REPORT

SABS

ORAFOL Europe GmbH
Attention: Dr. B. Görig
Orafolstraße 2
16515 Oranienburg

Your Ref: Oralite 6710 7 Years RA1
Our ref: GE 01(B)
Enquiries A. Rocha
Tel: 012 428 6365
Date: 14 March 2013
Report No: 2330/ GE 01 (B)
Page: 1 of 4

TESTING TO STANDARD SANS 1519-1: 2006(EDITION 2.2) "RETRO-REFLECTIVE SHEETING MATERIAL"

0. CONCLUSION

- 0.1 The sample complied with the requirements for class I, as requested in clause 3, as specified in standard SANS 1519 – 1: 2006 (Edition 2.2) as part of the accelerated artificial weathering cycle (Part A)
- 0.2 The natural weathering cycle (Part B) is in progress and will be reported every six months for coefficient of retro-reflection and colour and luminance factor, for a period of two years, as requested in clause 3, as specified in standard SANS 1519 – 1: 2006 (Edition 2.2).

1. SAMPLE DESCRIPTION

TABLE 1 - SAMPLE DESCRIPTION

Sample description	Colours	Marking displayed on the front surface of the retro-reflective sheeting
Oralite Engineering Grade Prismatic (EGP) retro-reflective sheeting material Class I	White	OR 6710 7 Years RA1
	Yellow	
	Green	
	Blue	
	Brown	

2. SAMPLE SUBMITTED

The sample was received in a condition suitable for testing.

Submission date : 10 January 2013
Testing starting date : 10 January 2013
Testing completion date : Tests in progress

SANAS Accredited Testing Laboratory No.T0085

1 Dr Lategan Road, Groenkloof, Private Bag X191, Pretoria, 0001. Tel +27 12 428 7911. Fax +27 12 344 1568

The test work relating to this report was performed by SABS Commercial SOC Ltd. This report and its test results relate only to the specific sample(s) identified herein. They do not imply SABS approval of the quality and/or performance of the item(s) in question and the test results do not apply to any similar item that has not been tested. This report may not be reproduced except in full. The authenticity of this report and its contents can be confirmed by contacting the person who signed it.



3. TESTS REQUESTED

Full test.

4. TEST METHOD

Conducted in accordance with the inspection and test methods of standard SANS 1519 -1: 2006 (Edition 2.2).

5. TEST RESULTS

TABLE 2 - TEST RESULTS

Description of requirements	Clauses	Test results
Constructional requirements (visual inspection)	4.1	Complied
Coefficient of retro-reflection (before weathering)	4.2.2	Complied See attachments
Colour and luminance factor (before weathering)	4.2.3 and 4.2.4 respectively	Complied (not SANAS accredited) See attachments, luminance factor on Table 3 and Exclusions
Accelerated artificial weathering (1200 hours exposure to xenon-arc)	4.3.1	Complied
Coefficient of retro-reflection (after weathering)	4.3.1	Complied See attachments
Colour and luminance factor (after weathering)	4.3.1	Complied (not SANAS accredited) See attachments, luminance factor on Table 4 and Exclusions
Natural weathering (two years exposure)	4.3.1	Tests in progress See Conclusion
Flexibility	4.3.2	Complied
Resistance to impact	4.3.3	Complied
Adhesion	4.3.4	Complied
Resistance to corrosion	4.3.5	Complied
Coefficient of retro-reflection (after resistance to corrosion)	4.3.5	Complied See attachments
Resistance to temperature changes	4.3.6	Complied
Coefficient of retro-reflection (after temperature changes)	4.3.6	Complied See attachments
Colour and luminance factor (after temperature changes)	4.3.6	Complied (not SANAS accredited) See attachments, luminance factor on Table 5 and Exclusions
Marking (visual inspection)	6.1.1	Complied

This test was performed by SABS Commercial (Pty) Ltd.
This report relates only to the specific sample(s) tested as identified herein. It does not imply SABS approval of the quality and/or performance of the item(s) in question and the test results do not apply to any similar item that has not been tested. (Refer also to the complete conditions printed on the back of official test reports.)

TABLE 3 – LUMINANCE FACTOR (BEFORE WEATHERING)

Colours	Luminance factor	Standard
White	0,47	$\geq 0,35$
Yellow	0,29	$\geq 0,27$
Green	0,07	$\geq 0,04$
Blue	0,04	$\geq 0,01$
Brown	0,04	0,03 to 0,09

TABLE 4 – LUMINANCE FACTOR (AFTER WEATHERING)

Colours	Luminance factor	Standard
White	0,47	$\geq 0,35$
Yellow	0,29	$\geq 0,27$
Green	0,07	$\geq 0,04$
Blue	0,04	$\geq 0,01$
Brown	0,04	0,03 to 0,09

TABLE 5 – LUMINANCE FACTOR (AFTER TEMPERATURE CHANGES)

Colours	Luminance factor	Standard
White	0,48	$\geq 0,35$
Yellow	0,29	$\geq 0,27$
Green	0,07	$\geq 0,04$
Blue	0,04	$\geq 0,01$
Brown	0,04	0,03 to 0,09

6. SUBCONTRACTING OF SABS LABORATORIES

Fibre & Polymers – resistance to artificial weathering test

Paints & Sealants – resistance to corrosion test

7. UNCERTAINTY OF MEASUREMENT

The estimated uncertainty of measurement of the photometric measurement is approximately 5,3 % for a 94,7 % level of confidence.

This test was performed by SABS Commercial (Pty) Ltd.,

This report relates only to the specific sample(s) tested as identified herein. It does not imply SABS approval of the quality and/or performance of the item(s) in question and the test results do not apply to any similar item that has not been tested. (Refer also to the complete conditions printed on the back of official test reports.)

8. EXCLUSIONS

Tests marked "not SANAS accredited" in this test report are not included in the SANAS Schedule of Accreditation for this laboratory.

9. NOTE

The sample must be exposed for a period of two years as part of the natural weathering cycle.



Tested by: A. Rocha
TECHNICAL SIGNATORY
LIGHTING TECHNOLOGY



Checked by: T. Fourie
MANAGEMENT SIGNATORY
LIGHTING TECHNOLOGY