

## Description

ORALITE® 5271 Sheeting is a weatherproof and self-adhesive retroreflective film with excellent corrosion and solvent resistance. The product was specifically developed for the manufacture of traffic control and guidance devices utilizing polyolefin substrates, e.g. barricades, which are intended for short term outdoor use. The material comes with a pre-printed 45° diagonal stripe. The pre-printed stripe is available for left-handed [LH] and right-handed [RH] applications.

## Product Construction

ORALITE® 5271 Sheeting is composed of an alkyd resin film. Its retroreflective system consists of glass beads which are embedded in a transparent layer of plastic material.

## Color

ORALITE® 5271 Sheeting is available in white / orange and white / red pre-printed 45° diagonal stripe. The colors comply with the daytime requirements of ASTM D4956-11a shown in Table 1 when tested in accordance with ASTM practices E308 and E1164 and test methods E1347 and E1349.

## Retroreflectivity

ORALITE® 5271 Sheeting complies with ASTM D4956-11a (Type I sheeting). The required minimum retroreflection values are shown in Table 2. The sheeting shall be measured in accordance with ASTM E810. When using ORALITE® 5271 Sheeting, the relevant national specifications should be followed. ORAFOL recommends you obtain the current requirements from your local authority and ensure product conformance with such requirements.

## Adhesive

The adhesive is protected by a release liner that shall be removed by peeling, without soaking in water or other solvents. The adhesive produces a bond such that a 1" wide strip shall support a 1 3/4 lb. weight for five minutes without the strip peeling a distance of more than 2" when applied to a smooth aluminum panel as specified in the ASTM D4956 adhesion test.

## Area of Use

The recommended application temperature to achieve best results is 50°F or above. ORALITE® 5271 Sheeting was developed for guidance and information signs as well as lettering applications. Please refer to the Practical Information #4.2 published by Orafol for full instructions. For other applications the user is fully responsible for evaluating the suitability of the product, and for any risks associated with that use.

## Shelf Life

ORALITE® 5271 Sheeting has a 2 year shelf life when stored in the original packaging, at 68°F and 50% relative humidity.

## Durability / Warranty

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions.

The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparation are not the responsibility of ORAFOL.

Please refer to the Warranty document published by ORAFOL for detailed information. Contact your ORAFOL Americas Inc. representative for details.



ORAFOL Americas – GA  
1100 Oracal Parkway  
Black Creek, GA 31308  
Phone: 888.672.2251

ORAFOL Americas – CT  
120 Darling Drive  
Avon, CT 06001  
Phone: 800.654.7570  
techsupport-americas@orafol.com - www.orafolamericas.com

ORAFOL Canada  
2831 Bristol Circle  
Oakville, Ontario L6H 6X5  
Phone: 888.727.3374

## Product Data

Table 1 – Daytime Chromaticity Coordinates* (ASTM D4956-11a)									
Colors	1		2		3		4		Luminance Factor [Y]
	X	y	X	y	X	y	X	y	
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	≥ 27
Red	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	2.5 ≥ Y ≥ 15
Orange	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404	10 ≥ Y ≥ 30

\* The four pairs of chromaticity coordinates determine the acceptable chromaticity on the CIE diagram. 1931 Standard Colorimetric System measured with CIE Standard Illuminant D<sub>65</sub>

Table 1 – Daytime Chromaticity Coordinates* (ASTM D4956-11a)									
Colors	1		2		3		4		Luminance Factor [Y]
	X	y	X	y	X	y	X	y	
White	0.303	0.300	0.368	0.366	0.340	0.393	0.274	0.329	≥ 27
Red	0.648	0.351	0.735	0.265	0.629	0.281	0.565	0.346	2.5 ≥ Y ≥ 15
Orange	0.558	0.352	0.636	0.364	0.570	0.429	0.506	0.404	10 ≥ Y ≥ 30

### Note:

All ORALITE® products are manufactured within an ISO 9001:2008 controlled manufacturing environment and batch traceability is possible on the basis of the roll number.

### IMPORTANT NOTICE

When using ORALITE® sheeting, please comply with relevant national specifications. ORAFOL recommends obtaining the current requirements from your local authority and ensure product conformance with such requirements. Please contact ORAFOL for further information.

All ORALITE® products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects. Published information concerning ORALITE® products is based upon research which the Company believes to be reliable, although, such information does not constitute a warranty. Because of the variety of uses of ORALITE® products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. All specifications are subject to change without prior notice.

Surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination which could affect the adhesion of the material. Freshly lacquered or painted surfaces should be allowed to dry for at least three weeks and to completely cure respectively. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. The self-adhesive reflective material can only be used for dry application. The low tensile strength of the material can make the removability of the reflective film more difficult. Please review applicable application information published by ORAFOL.

No warranty is given for purposes other than those listed in the Technical Datasheet or which are not processed according to ORAFOL's processing and handling instructions. The durability of the signs will depend on a variety of factors, including but not limited to substrate selection and preparation, compliance with recommended application guidelines, geographic area, exposure conditions and maintenance of the product and finished sign. Sign failures caused by the substrate or improper surface preparations are not the responsibility of ORAFOL. Please refer to the full warranty document available at [www.orafolamericas.com](http://www.orafolamericas.com) for detailed information.

WARNING: This product contains chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

ORALITE® is a trademark of ORAFOL Europe GmbH.



ORAFOL Americas – GA  
1100 Oracal Parkway  
Black Creek, GA 31308  
Phone: 888.672.2251

ORAFOL Americas – CT  
120 Darling Drive  
Avon, CT 06001  
Phone: 800.654.7570  
techsupport-americas@orafol.com - [www.orafolamericas.com](http://www.orafolamericas.com)

ORAFOL Canada  
2831 Bristol Circle  
Oakville, Ontario L6H 6X5  
Phone: 888.727.3374