

## Product Description

Series ORALITE® 5061 Transparent Films are clear or coloured high-performance PMMA films with long durability and a glossy surface. The material features excellent transparency, outstanding dimensional stability and optimum cutting and processing properties.

The clear ORALITE® 5061 serves as protective laminate, especially for digitally printed inks from all ORALITE® Traffic Printers. It protects printed traffic signs from premature bleaching and ensures the performance of retro-reflectivity and colour of the laminated print.

Coloured films of ORALITE® 5061 series serve the manufacture of plotted traffic signs film on certified white reflective ORALITE® base films. The product is developed for use on highly durable base films with 7 to 12 years of service life. Sign faces fulfil the requirements for coefficient of retroreflection and colour coordinates of specifications such as EN 12899-1, DIN 67520 or ASTM D4956 for its reflectivity class.

## Adhesive

The adhesive consists of a solvent polyacrylate, permanent pressure sensitive adhesive specially formulated for the application to ORALITE® sheeting surfaces, including digital and UV digital printed surfaces. The adhesive is protected by a 75 µm PET release liner, single side silicone coated.

## Colours

In addition to highly transparent clear film (colour code 000), the following colours are available for ORALITE® 5061 Transparent Film: Yellow (colour code 020), red (030), orange (035), blue (050), green (060), and brown (080). Black is available as opaque colour (070).

## Application/Processing

ORALITE® 5061 Transparent Film performs best on ORALITE® sheeting, unprinted or printed with ORALITE® inks. The surfaces to which the material will be applied must be completely dry, thoroughly cleaned from dust contamination which could affect the adhesion of the material. Freshly printed surfaces should be completely cured. The compatibility of selected inks and surfaces should be tested by the user, prior to application of the material. For other applications the user is fully responsible for evaluating the suitability of the product, and for any risks associated with that use.

We recommend plotter cutters, ideally flatbed plotters, to manufacture letterings, symbols and the like from ORALITE® 5061. The stencil should have a 30° blade and must be clean and sharp. The plotter layout shall have no sharp angles (always create a radius) to avoid later formation of cracks or wrinkles. To transfer the plot onto the sign face, we recommend ORATAPE® MT72 and a flatbed applicator such as a RollsRoller or similar machines.

When large traffic signs are manufactured, ORALITE® 5061 must not be bonded across more than one panel. A gap of 1-2 mm between the sheeting on adjacent panels compensates later shrinking and expansion in outside temperatures. If ORALITE® 5061 is applied side by side on one panel, overlap 2 mm and always use the same direction of the web side by side.

Carefully remove the application tape pulling off with a narrow angle and check for any detachments of the laminate/reflective film sandwich. Again, squeegee critical areas and trim all edges in 45° angle with a sharp cutter knife to complete the sign face.

An ambient temperature of 18-24° and a controlled humidity of 40-60% are recommended throughout the entire process.

The storage of large signs with ORALITE® 5061 is done vertically on wooden beams and with spacers (at least 10 cm for outdoor storage / 1.5 cm for indoor storage). When transporting traffic signs, the surfaces must not rub against each other or the foil sides should lie directly on top of each other (face to face). Trapped moisture must be avoided: remove damp packaging, do not store damp signs. Improper handling may affect retroreflection or surface finish.

Please refer to the Practical Information 4.3 and 4.4 published by ORAFOL for full instructions or contact your ORAFOL Reflective Solutions Division representative for advice relating to the above.

**Note:** All ORALITE® products are manufactured within an ISO 9001:2015 controlled manufacturing environment and batch traceability is possible on the basis of the roll number.

## Product Data

<b>Thickness*</b> (without protective paper)	0.12 mm	
<b>Dimensional stability</b>	applied on steel, no measurable shrinking in cross direction, in length direction 0.1 mm (0.0039 in)	
<b>Temperature resistance</b>	adhered to aluminium, -56° C to 90° C (-69° F to 194° F)	
<b>Resistance to cleaning agents</b>	adhered to aluminium, 8h in solution (0.5% household cleaning agents) at room temperature and 65° C (150° F), no variation	
<b>Adhesive power*</b> (FINAT-TM2 after 24h, stainless steel)	18 N/25 mm (1 inch)	
<b>Shelf life**</b>	2 years	
<b>Application temperature</b>	> +10° C (50° F)	
<b>Service life by specialist application***</b> under vertical outdoor exposure	Laminates are expected to provide the same lifetime as the reflective sheeting onto which it is applied.	
* average	** in original packaging, at 20° C and 50% relative humidity	***standard central European climate

**Note:** Values stated in SI units are to be regarded as standard. The values in parentheses are conversions and shall not be considered as the standard, as these values maybe approximate.

## IMPORTANT NOTICE

When using ORALITE® sheeting the relevant national specifications have to be complied with. ORAFOL recommends you obtain 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.

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.

ORALITE® is a trademark of ORAFOL Europe GmbH.

