

Product Description

ORALITE® 5090 Anti-Dew Film is a self-adhesive functional overlay film with a surface to enhance the performance of traffic signs in high humidity climates above freezing. Its unique coating prevents the formation of water droplets on the surface of sign faces that would reduce its performance. Protection of road signs with ORALITE 5090® Anti Dew Film adds visibility to the sign and enhances road safety.

At the same time, the laminate protects the digital prints underneath against premature fading and ensures that traffic signs printed with ORALITE® 5019i UV Digital Inks meet the requirements for reflection and colour.

When ORALITE® 5090 film is used on road signs of any traffic color, they will continue to meet the required level of reflectivity for its class and comply with international specifications such as EN 12899-1, DIN 67520 and DIN 6171, ASTM D 4956 or JIS Z 9117.

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 release liner made of PET, silicone coated on one side, 0.075 mm [0.003"] thickness.

Application/Processing

ORALITE® 5090 Anti-Dew Film is designed for use on unprinted or printed ORALITE® films. The surfaces to which the material will be applied must be dry and 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.

ORALITE® 5090 is protected by a thin film of a transparent, water-soluble polymer layer. This protective coating should be washed off with clear water and a soft cloth or sponge after the traffic sign has been manufactured, before being stored outdoors or exposed to sunlight. Avoid contamination with silicones or grease as they permanently destroy the anti-dew performance.

The storage of large signs with ORALITE® 5090 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.

For more information, see the processing instructions for ORALITE® Reflective Sheeting to be laminated, or contact your local ORAFOL Reflective Solutions Division representative.

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

Thickness* (without protective liner)	0.12 mm
Dimensional stability (FINAT TM 14)	applied on steel, no measurable shrinking in cross direction, in length direction 0.1 mm
Temperature resistance	adhered to aluminium, -56° C to 90° C
Salt-water resistance (DIN 50021)	adhered to aluminium, after 100h at 23° C no variation
Resistance to cleaning agents	adhered to aluminium, 8h in solution (0.5% household cleaning agents) at room temperature and 65° C (150° F), no variation
Adhesive power* (FINAT-TM1 after 24h, stainless steel)	18 N/25 mm (1 inch) (film tear)
Shelf life**	2 years
Application temperature	> +10° C (50° F)
Service life by specialist application*** under vertical outdoor exposure	Up to 10 years anti-dew functionality and the same lifetime as the reflective sheeting on 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 may be 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. Please refer to the full warranty document available at www.orafol.com for detailed information.

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