ORALITE® Radiance

Description

ORALITE® Radiance is a tough weather resistant, highly reflective sheeting designed for rugged outdoor use on cone collars and delineators. The product is die cuttable and plotter cuttable with no need for edge sealing.

Product Construction

ORALITE® Radiance is composed of cube corner (microprism) retroreflective elements integrally bonded to a flexible, smooth-surfaced tough and weather resistant UV stabilised polymeric film. The prism surfaces are coated with a vacuum deposition of aluminium to provide a mirror surface to the prism facets. An aggressive pressure sensitive adhesive is laminated to the aluminium for adhesion to e.g. the cones.

Film Logo Pattern

Shadow logo (prism visible like a hologram)



Colour

ORALITE® Radiance is available in silver.

Retroreflectivity

When illuminated with CIE illuminate A and measured with provisions of CIE No. 54 the coefficient of retroreflection (RA) of ORALITE® Radiance is shown in Table 1. The film meets or exceeds the requirements of NF P98-455.

Impact Resistance

ORALITE® Radiance shall show no signs of cracking or delamination outside the actual area of impact when it is subjected to an impact of 11,3 N·m generated by a 1,8 kg weight with a 16 mm rounded tip on a Gardner variable impact tester, IG-1120. As per ASTM D4956.

Flexibility Resistance

ORALITE® Radiance is conditioned to 0° C. The sheeting is sufficiently flexible to show no cracking when bent in one second time around a 3,2 mm diameter mandrel with the adhesive contacting the mandrel as specified in ASTM D 4956 reboundable sheeting requirements (S2.2.2).

Solvent Resistance

ORALITE® Radiance will not dissolve, blister or pucker when wiped with a soft cloth wet with kerosene, mineral spirits, turpentine, VM&P Naphtha, 5% HCL, NaOH or Methanol.

Adhesive

The adhesive is protected by a release liner which shall be removed by peeling, without soaking in water or other solvents. Different adhesives can be supplied depending on the substrate. Please contact ORAFOL for further information.

Shelf Life

The product must be used within one year from the shipment date. All rolls including partially used rolls should be stored in original packaging, tightly wound. Store in a clean and dry area, away from direct sunlight. Store at 20° C and 50% relative humidity.



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Table 1 Retroreflectivity

Colour	Observation angle = 0° Entrance angle (β1) = 5° Rotation angle = 0°
Silver	700

All values have units of cd/lux/m².

IMPORTANT NOTICE

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.

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