# **ORAGUARD® Series 293 Ultra Flexible Cast PVC Laminating Film**

## **Description**

1-mil, flexible transparent premium cast PVC film with a UV extension factor of four years. Available in gloss finish.

Release Liner

55# silicone coated paper

Adhesive

Clear, solvent-based, permanent adhesive

# Applications

For the indoor and outdoor protection of large format digital prints. Because of it's extra flexibility ORAGUARD<sup>®</sup> 293 is recommened for vehicle wrapping in combination with ORAJET<sup>®</sup> 3551, 3551RA, or ORALITE<sup>®</sup> 5600.

## **Technical Data**

Thickness (without liner and adhesive)	1 mil
Temperature Resistance	Adhered to aluminum, -58°F to +230°F, no variation
Fire Behavior (DIN 75200) Fire Rating	Adhered to steel, self-extinguishing ASTM E 84-07 Class "A"
Adhesive Power (FINAT TM-1, after 24 h, average)	Adhered to stainless steel: 2.74 lb/in
Tensile Strength (DIN EN ISO 527)	Along: Min. 19 MPa Across: Min. 19 MPa
Elongation at Break (DIN EN ISO 527)	Along: Min. 120% Across: Min. 120%
Seawaterability (DIN 50 021)	Adhered to aluminum, after 100h/73°F, no variation
Shelf Life (68°F/50% relative humidity)	2 years
Minimum Life Expectancy (based on accepted application procedures on vertical surfaces)	8 years
Minimum Application Temperature	46°F
Available Lengths Available Widths (inches)	150' (50-yard) 30, 36, 40, 50, 54, 60
Recommended to be used in combination with	ORAJET <sup>®</sup> Series 3951*, 3951RA*, 3951HT, 3850, 3751RA*, 3551, 3551RA, 3551DT, 3109, 3105HT and ORALITE <sup>®</sup> 5600
UV Protection Extension Factor	+4 years
ORACAL <sup>®</sup> recommends that printed film be allowed to dry for	or at least 24 hours at 70°F (48-72 preferred) before applying a laminate.

\*Applications using 3951/3951RA/3751RA laminated with 293 are recommended for highly experienced vehicle wrap installers ONLY.

#### Attention

Recycling Recommendation: Waste class similar to household waste, is to be recycled according to the local regulations.

Surfaces to which the material will be applied must be cleaned thoroughly of dust, grease or any contaminants. Freshly lacquered or painted surfaces should be allowed to stand for at least three weeks after complete curing. The compatibility of selected lacquers and paints should be tested by the end-user prior to use.

The statements in this information sheet are based upon our knowledge and practical experience. This data is intended only as a source of information and is given without any guarantee and does not constitute a warranty. Due to the wide variety of possible uses and applications, customers should independently determine the suitability of this material for their specific purpose, prior to use.

