

ORAGUARD® 210 INTERMEDIATE CALENDERED PVC CLEAR OVER-LAMINATE

Technical Datasheet
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Description

Intermediate (Short to Medium-Term) Calendered PVC Clear Over-Laminate

Release Liner

55# silicone-coated paper

Adhesive

Clear, solvent-based, permanent adhesive

Film Construction

Short to Medium-Term Calendered PVC Film

Finish

Available in gloss, semi-gloss, and matte

Color

Transparent clear

Applications

- Suggested use: Protective over-laminate applied to digitally printed graphics on qualified ORAJET® digital print media for the following applications:
 - Flat, short- to medium-term applications
 - short- to medium-term outdoor general signage
 - long-term indoor general signage
 - window graphics
 - wall graphics and murals
 - stickers & decals
- Not designed for vehicle or trailer graphics or wrapping

Outdoor Durability

- Up to 4 years (*vertical exposure, Climate Zone 1*)

Splice Free Guarantee

Our Splice Free Guarantee assures you that every roll of ORAGUARD® over-laminate is free from splices. If you identify a verifiable splice, we will promptly replace the roll at no cost and provide you with \$500 as a token of our commitment to your satisfaction and uninterrupted graphic production experience.

Benefits of Using a Protective Over-Laminate

1. **Enhanced Installation:** The over-laminate adds structure and stability to digitally printed graphics, improving installation by reducing wrinkles and bubbles for a smoother application process.
2. **Increased Ink Lifespan:** By providing extra protection against UV rays, the over-laminate extends the lifespan of printed inks, preserving colors and preventing fading over time.
3. **Customizable Appearance:** The over-laminate allows for a tailored final appearance of the printed graphic, offering options such as uniform gloss, semi-gloss, or matte finishes. Semi-gloss and matte finishes also reduce glare, enhancing visibility and readability of the graphic.

Additionally, protective over-laminate provides a degree of protection against abrasion, ensuring the longevity and durability of the printed graphic in high-traffic areas or environments prone to wear and tear.



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Technical Data

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| Thickness (without liner and adhesive) | 2.5-mil |
| Temperature Resistance | Adhered to aluminum, -40°F to +176°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. 130% Across: Min. 150% |
| Shelf Life (68°F/50% relative humidity) | 2 years |
| Minimum Life Expectancy (based on accepted application procedures on vertical surfaces) | 4 years |
| Minimum Application Temperature | 46°F |
| Available Lengths Available Widths | 30' (10-yard)*, 150' (50-yard) *20" rolls only 20", 30", 36", 50", 54", 60" |
| Recommended ORAJET® Digital Print Media | ORAJET® 1917, 3620, 3621, 3640, 3641, 3161DT, 3164, 3164HT, 3164RA, 3164XRA, 3165, 3165RA, 3651, 3651RA |
| UV Protection Extension Factor | +2 years |

For best results, utilize ORAFOL ICC profiles available at www.orafol.com and allow solvent-based inks to dry for at least 24 hours (48-72 hours preferred) at 70°F before cutting the graphic to the ink or applying a laminate.

Note

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 completely cured. The compatibility of selected lacquers and paints should be tested by the user, prior to application of the material. Films with structured surface are naturally more sensitive than the unstructured. Accordingly, these films are to be treated carefully both in processing and in cleaning. Impurities affect the appearance of structured films and require more frequent cleaning. Furthermore the application information published by ORAFOL is to be considered. The batch traceability according to ISO 9001 is possible on the basis of the roll number.

IMPORTANT NOTICE

All ORACAL® 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 ORACAL® 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 ORACAL® 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.

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



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