

ORACAL® 8500

TRANSLUCENT HIGH PERFORMANCE CAST

Technical Datasheet

12/24

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Description

ORACAL 8500 is a high-performance, translucent colored backlit material designed for illuminated signage and graphics, such as storefront channel letters. With a satin finish and a thickness of 3 mil, this film provides excellent durability and vibrant color.

Also, consider these additional ORAFOL Graphic Solutions when constructing illuminated signage and graphics:

- [ORACAL 8870 Blockout Premium Cast](#)
- [ORACAL 8830 Diffuser Premium Cast](#)
- [ORACAL 8860 Diffuser Premium Cast](#)
- [ORACAL 8800 Translucent High-Performance Cal](#)
- [ORAJET 3850 Translucent High-Performance Cal Digital Print Media](#)
- [ORAJET 3951 Transparent Cast Digital Print Media](#)
- [ORAJET 3551 Transparent High-Performance Cal Digital Print Media](#)

Key Features

- Finish: Satin
- Thickness: 3 mil
- Adhesive: Solvent-based, permanent
- Color: Available in 55 vibrant colors

Release Liner

84# silicone-coated paper. Customized blue silicone paper liner for white face film provides superior contrast.

Adhesive

Clear, solvent-based, permanent adhesive

Applications

- Illuminated channel letters and sign faces
- Illuminated retail, television set, and tradeshow displays

Outdoor Durability

- Climate Zone 1
 - Colors 7 years
 - Metallics 5 years
- Climate Zone 2
 - Colors 5 years
 - Metallics 3 years
- Climate Zone 3
 - Colors 3 years

Compatible Substrates

- Acrylic
- Polycarbonate
- Glass

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.



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Thickness (without liner and adhesive)	3-mil
Dimensional Stability (FINAT TM-14)	Adhered to steel, no shrinkage in cross direction; In length, <.008"
Temperature Resistance	Adhered to acrylic, -40°F to +194°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 glass: 4.1 lb/in Adhered to acrylic: 3.7 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%
Resistance to Solvents and Chemicals	Adhered to acrylic after 8h in 0.5% household cleaning agents at room temperature and 149°F, no variation
Shelf Life (68°F/50% relative humidity)	2 years
Minimum Life Expectancy (based on accepted application procedures on vertical surfaces)	7 years - colors 5 years - metallic
Minimum Application Temperature	46°F
Available Lengths Available Widths	150' (50-yard) and 30' (10-yard) 15" (punched), 24", 30", 36" (black and white only), 48"
Recommended Application Tapes	ORATAPE® Series HT55, MT95, MT72, MT80P
Print Compatibility	Thermal Transfer

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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