Product Data Sheet

1. Model: ORP3000 (Plotter Grade Reflective Film)

2. Description: ORP3000 belongs to the micro bead embedded type reflective film. Its ink-receptive coating is specially designed for digital inkjet printing, offering excellent absorption of eco-solvent inks and high color reproduction. ORP3000 also features excellent flexibility, is non-tearable, and is ideal for application operations with good computer cutting performance.

3. Application: Advertising signs

4. Specification: 1.24 m x 45.7 m

5. Colors: White, Yellow

6. Weather Resistance: 3 years

7. Surface Material: PVC

8. Product Thickness: 190 μ ± 5 (excluding release liner)

9. Backing Paper Weight: 115 g/sqm

10. Printing Performance: Suitable for eco-solvent inkjet inks (use matching inks according to printer model).

11. Adhesive Type: Pressure-sensitive adhesive

12. Application Temperature: 18 °C ~ 28 °C

13. Service Temperature: -20 °C ~ 60 °C

14. Colorimetric Performance

Standard Illuminant: D65

Illumination / Observation Geometry: 45/0

Field of View: 2°

Color	x y	x	y	x	y	x	y	Luminance Factor Y%
White	0.350 0.360	0.300	0.310	0.285	0.325	0.335	0.375	≥ 0.27
Yellow	0.545 0.454	0.464	0.534	0.427	0.483	0.487	0.423	0.16 --- 0.40
Red	0.690 0.310	0.658	0.342	0.569	0.341	0.595	0.315	0.03 --- 0.10
Green	0.007 0.703	0.026	0.399	0.177	0.362	0.248	0.409	0.03 -- 0.10
Blue	0.078 0.170	0.137	0.038	0.210	0.160	0.150	0.220	0.01 --- 0.10

15. Retroreflective Performance

Observation Angle	Entrance Angle	White	Yellow
0.2°	-4	15	8

16. Other

Item	Sub-item	Test Method (GB/T18833, EN12899)	Standard	Test Result
Adhesion Performance		Displacement distance under 800 g load at 90° angle for 5 minutes	< 20 mm	5 mm
Temperature Resistance		-40 °C × 72 h, 70 °C × 24 h	No cracking, chalking, or delamination	No effect
Artificial Accelerated Aging Performance	Retroreflection Coefficient	Aging test 300 h, wavelength 300 nm ~ 800 nm, irradiance 1000 W/m² ± 100 W/m²	Not less than 50% of standard (Table 14)	Pass

Artificial Accelerated Aging Performance	Shrinkage	Aging test 300 h, wavelength 300 nm ~ 800 nm, irradiance 1000 W/m² ± 100 W/m²	Shrinkage on any side not exceeding 0.8 mm	Pass
	Color Fastness		Chromaticity coordinates meet standard requirements (Table 13)	Pass
	Adhesion		No peeling or warping from substrate	Pass