



DATA SHEET

Economical Europe-One-way Vision UV

UV Printing One-way vision
OCV - 16170-UV

Economical Europe-whiteSelfAdhesive Vinyl — OCV - 16170-UV / 18months

Advantages

- High ratio of performance to price
- Excellent ink absorption
- Suitable for use on a variety of super wide format inkjet printers using UV | Eco-solvent | Full-solvent inks

Applications and Uses

- Window surface areas

Characteristics

Characteristic	Description
Film	Black and white PVC Film-1.5mm Per
Gloss	Gloss & Matt
Thickness (Film)	160um ± 10um
Adhesive	Permanent
Adhesive color	Clear
Coating weight (Dry)	20g ± 2g
Liner	Refined semi-perforated Composite pure wood pulp paper
Weight, liner	170g ± 5g
Application surfaces	Flat and simple curves
Application substrates	Glass
Application temperature range (air and substrate)	-20°C ~ +65°C
Transmittance	40%

Effective Performance Life

The effective performance life is based on field experience and exposure tests conducted by Lab. When the graphics are processed and used according to the Harker recommendations, they should have the performance life shown in the table below. The actual performance depends on

- Correct combination of film, ink, over laminate or clear coat
- Drying methods
- Selection and preparation of the substrate
- Application methods
- Orientation and exposure conditions

Conversion

- ✓ Cold over laminating
- ✓ Mild / Eco solvent inkjet
- ✓ UV curable inkjet
- ✓ Latex inkjet
- ✓ Friction fed cutters
- ✓ Solvent inkjet

Conversion not commended

- ✗ Thermal transfer
- ✗ Flat bed cutters
- ✗ Water based inkjet
- ✗ Electrostatic printing
- ✗ Die cutting
- ✗ Offset Printing
- ✗ Screen printing

- Cleaning methods

Printing with Solvent-Based Inkjet Inks

Always test with your combination of printer and ink prior to commercial use.

Total Ink Coverage

Do not exceed 250% total ink coverage for film OCV UV. Too high a total physical ink amount on the film results in media characteristic changes, inadequate drying, over laminating, and/or poor graphic performance.

To enhance colour and protect images against UV radiation and abrasion, OCV UV is recommended to be over-laminated with Cold over-laminating Film or Clear Coat

When to Use an Over laminate or Clear Coat

- Commercial vehicle and fleet graphics; such graphics are subjected to abrasion such as road debris and automatic/power washing.
- Any graphic exposed to abrasive washing conditions, including automatic/power washing, harsh cleaners or chemicals.

Application

Do not stretch the film during application. If you stretch the film it will tent or lift.

Obtain prequalification from Technical Service before applying to any un-qualified surface

When applying graphics to flat surfaces, the temperature range for both the air and substrate is 3°C to 38°C. The film sticks well at the lower end of this temperature range. However, keep these considerations in mind:

- The film becomes less flexible the colder it is.
- At temperatures lower than 3°C moisture may condense on the substrate, which prevents good adhesion.

Maintenance and Cleaning

Use a cleaner such as the kind used for high quality painted surfaces. The cleaner must be wet, non-abrasive, without strong solvents, and have a pH value between 3 and 11 (neither strongly acidic nor strongly alkaline.)

Shelf Life, Shipping, and Storage

- For unprocessed film, shelf life is 1 year. Store the film in a dry area, in the original container, out of direct sunlight and at less than 24°C

Ship the finished graphic lying flat or in a roll. To roll the graphic, roll it film side out onto a core that is 3 inches or larger in diameter. These methods help prevent the film and application tape from wrinkling or popping off the liner.

Product Characteristics

Physical Properties

Features	Test Method	results
Caliper, facefilm	GB/T6672	160 micron (µm)
Liner	GB4669	170g/m ²
Dimensional stability	FINAT -14	Max. 0.5mm
Perforation diameter		1.5mm
Elongation		≥130%
Gloss	GB8807-88, 60°	>35
Adhesion, initial	FINAT FTM-1, Glass	260 N/M
Adhesion, ultimate	FINAT FTM-1, Glass	380 N/M
Removability	Smooth OEM printing surface	>10000Min
Release	FINAT -4	15 ~ 40 /ginch
Flammability		Self extinguishing
Shelf life	Stored at 24 °C/5060%-RH	12 Month
Durability, unprinted, outdoor	Vertical exposure	18 Month

Thermal

Application temperature:
Temperature range :

+10°C
-20°C ~ +65°C

Chemical

Resistant to most petroleum based oils, greases and aliphatic solvents
Resistant to most mild acids, alkalies, and salts

Warranty

materials are manufactured under careful quality control and are warranted to be free from defect in material and workmanship. Any material shown to our satisfaction to be defective at the time of sale will be replaced without charge. Our aggregate liability to the purchaser shall in no circumstances exceed the cost of the defective materials supplied. No salesman, representative or agent is authorised to give guarantee, warranty, or make any representation contrary to the foregoing.

Durability

The durability is based on European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing north; in areas of long high temperature exposure in industrially polluted areas or high altitudes, exterior performance will be decreased.

Test Methods:

Dimensional stability:

Is measured on a 150 x 150 mm aluminium panel to which a specimen has been applied; 72 hours after application the panel is exposed for 48 hours to + 70C; after which the shrinkage is measured.

Adhesion:

(FTM-1, FINAT) is measured by peeling a specimen at a 180 °angle from a stainless steel or float glass panel, 24 hours after the specimen has been applied under standardised conditions. Initial adhesion is measured 20 minutes after application of the specimen.

Flammability:

A specimen applied to aluminium is subjected to the flame of a gas burner for 15 seconds. The film should stop burning within 15 seconds after removal from the flame.

Temperature range:

A specimen applied to stainless steel is exposed at high and low temperatures and brought back to room temperature. 1 hour after exposure the specimen is examined for any deterioration. Note: Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids, dyes, etc. may eventually cause deterioration.

Chemical Resistance:

All chemical tests are conducted with test panels to which a specimen has been applied. 72 hours after application the panels are immersed in the test fluid for the given test period. 1 hour after removing the panel from the fluid, the specimen is examined for any deterioration.

Corrosion Resistance:

A specimen applied to aluminium is exposed to saline mist (5% salt) at 35C°. After exposure, the film is removed and the panel is examined for traces of corrosion.

