# **Product Data Sheet**



# K70000/K71000/K71100 Series Premium Cast Vinyl

# **Product Description**

These premium quality cast vinyl films are intended for use in all exterior marking and signage applications.

The films have the ultimate properties for outdoor durability. They are very conformable making them perfect for use on smooth, textured and contoured surfaces, and are available in a wide range of colours with a permanent adhesive and double-sided PE coated liner.

#### **Recommended Uses**

- Graphics on original equipment identification
- Building signage
- Vehicle graphics to include trucks, recreational vehicles and automobiles
- Train liveries
- Boats
- Temporary livery of aircraft

End users of the K70000 Series have included OEMs, aftermarket livery companies and national airlines.

### **Products Available**

Available in an extensive range of gloss solid and metallic colours along with matt versions of the black, white and clear and etched glass effect. See KPMF's Cast Colour Card or Cast Swatch to see the full range of cast colours.

# **Custom Colours**

Custom colour matching is offered to suit specific requirements (subject to minimum quantities).

# **Physical Characteristics**

Film Thickness Elongation Dimensional Stability (48 hours/70°C) Gloss 60°

20 minute 180° Peel 24 hour 180° Peel Flammability Artificial Weathering

#### **Outdoor Weathering**

Black/White/Clear Colours Metallics Etch Window Films

#### **Test Method**

ISO 4591:1992 ISO 527-3:2018 FTM14/Aluminium ASTM D523-14 (2018)

FTM1/Painted Steel FTM1/Painted Steel

Xenon Arc

Vertical Exposure/Mid Europe

# Face Film 30μm – 57μm Premium Cast

#### Adhesive

25g/m<sup>2</sup> clear permanent solvent-based acrylic

Release Liner

Double-sided PE - printed grey KPMF logo

 Widths 1220mm & 1524mm

### Durability

Up to 12 years outdoors (vertical exposure, mid-Europe)

### Shelf Life

2 years (out of direct sunlight, between 15°C and 23°C, 30% to 70% relative humidity)

#### **Typical Value**

30μm - 57μm >75% <0.4 mm Gloss >85 Matt<20 >450 N/m >530 N/m Self-extinguishing >2000 hours >1000 hours window films

10-12 years 8-10 years 5 years 5 years

Temperature Range		Minimum +10ºC
Application Temperature		
Service Temperature		-40ºC to +90ºC
Resistance to various liquids after after test	application and conditioned for 24 ho	urs at 23°C. Results examined 1 hour
Humidity	24 hours at 38°C and 100%	No effect
Water (Distilled)	24 hours at 32°C	No effect
Diesel Fuel	1 hour at 23°C	No effect
SAE Motor Oil	24 hours at 23°C	No effect
Antifreeze/Water (1:1)	24 hours at 23°C	No effect

#### **Product Usage Guide**

Typical application for outdoor durability, for graphics on original equipment identification, building signage and vehicle graphics to include trucks, recreational vehicles and automobiles. They are also widely used for train liveries, boats and as temporary livery on aircraft.

The materials are very conformable, being able to be used on smooth, textured and contoured surfaces, and are available in a wide range of colours including metallic.

Custom colour matching is offered to suit specific requirements. (Subject to minimum quantities).

KPMF films should not be applied to unsound surfaces or to surfaces which may subsequently crack, peel, outgas or are of low surface energy. It is recommended that any application surface should have an energy level in excess of 40 dyne/cm. (Polyolefins should be in excess of 45 dyne/cm).

Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids etc. may eventually cause deterioration. Actual performance will depend on substrate preparation, exposure conditions and application of marking.

When using metallic finish films, always keep the application direction of the film consistent with the orientation of the film from the roll when applying to the vehicle.

Although we have good control of the colour production of KPMF products at our multiple locations, as with all other manufacturer's products, customers should be aware that there may be subtle variances between samples, swatches and production materials, so therefore it is advisable to avoid using different batches of material for the same end application to avoid possible colour shifts between the batches.

Application temperature onto clean, dry surface min +10°C.

#### Product Warranty

Kay Premium Marking Films are produced under stringent manufacturing conditions. The information and typical values shown are based upon research believed to be reliable and are provided without guarantee and do not constitute a warranty. The values are not for use in specifications. Ink and paint systems can affect the performance of film and also the adhesive properties, as can application techniques. Users are advised to ensure that performance and reliability are not compromised by determining the suitability of each product prior to its intended use.

Kay Premium Marking Films are produced under careful quality control and are warranted to be fit for the purpose and free from defect in material and workmanship. Any material shown to be defective to our satisfaction at the point of sale shall be replaced free of charge. Kay Premium Marking Films Limited liability to the purchaser shall in no circumstances exceed the cost of the amount of the defective material supplied.

There is no guarantee made for; ease or speed of graphic removal, removal from improperly cured paint, removal from oxidized or chalked substrates, or from horizontally exposed outdoor applications. Due to the large variety of available substate finishes, it is advisable to fully evaluate small areas particularly after printing prior to complete applications.

The data included on the Data sheet shows typical properties and should not be taken as a guarantee for performance.