

Product Data Sheet



K52000 Series Digital Vinyl

Product Description

These specially produced polymeric vinyl films have been developed for applications where excellent processing and digital print properties are required. The 75-micron thickness offers excellent conformability and adhesion to a variety of substrates.

There are two products in the range.

Recommended Uses

- Vehicle graphics
- Signs
- Window graphics
- Equipment identification
- General sign and decal applications which require optimum outdoor exposure

Products Available

- K52001 Gloss Clear Polymeric
- K52011 Gloss White Polymeric

Face Film

75µm Polymeric Calendared

Adhesive

25g/m² clear permanent solvent-based acrylic

Release Liner

Single-sided PE – non-printed

Widths

1370mm & 1600mm

Durability

Up to 7 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)

Physical Characteristics

	Test Method	Typical Value
Film Thickness	ISO 4591:1992	75 µm
Elongation	ISO 527-3:2018	>50%
Dimensional Stability (48 hours/70°C)	FTM14/Aluminium	<0.5 mm
Gloss 60°	ASTM D523-14 (2018)	Gloss >70
20 minute 180° Peel	FTM1/Painted Steel	>650 N/Metre
24 hour 180° Peel	FTM1/Painted Steel	>850 N/Metre
Flammability		Self-extinguishing
Artificial Weathering	Xenon Arc	>1000 hours
Outdoor Weathering	Vertical Exposure/Mid Europe	7 years
Temperature Range		
Application Temperature		Minimum +10°C
Service Temperature		-20°C to +90°C
Resistance to various liquids after application and conditioned for 24 hours at 23°C. Results examined 1 hour after test		
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 applications include digital print for signage, vehicle graphics, signs and decal applications.

Suitable for applications in outdoor and indoor environments, offers excellent cutting and weeding properties. 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.

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. Due to the large variety of available paint 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.