



Data Sheet Digital K52000 Series

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.

Typical applications include vehicle graphics, signs, window graphics, equipment identification and all general sign and decal applications which require optimum outdoor exposure. There are two products in the range:

Products available

- K52001 Gloss Clear Polymeric
- K52011 Gloss White Polymeric

Physical Characteristics

	TEST METHOD	TYPICAL VALUE
Film Thickness	ISO 4591:1992	75 µm
Elongation	ISO 527:1996	>50%
Dimensional Stability (150 x 150mm/48 hours/70°C)	FTM14/Aluminium	<0.5 mm
Gloss 60°	ASTM 523-89	Gloss >70

Adhesive

Clear Permanent Cross Linking Acrylic

Adhesive properties

Adhesive Thickness 25g/m²

Adhesion to stainless steel 20 Mins/180° >650 N/Metre

Adhesion to stainless steel 24 Hrs/180° >850 N/Metre

Release Liner

Unprinted Single Sided PE

Widths

1370mm / 1600mm



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Durability

Flammability		Self-Extinguishing
Artificial Weathering	Atlas Xenon Arc	>1000 hours
Weathering - Gloss White / Clear	Vertical Exposure/Mid Europe	7 years

Durability is based on middle European exposure conditions.

Service Temperature -20°C to +90°C

Resistance to various liquids after application of a 25mm strip of vinyl to stainless steel and conditioned for 24 hours at 23°C prior to immersion. 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
Sea Water	1 year Mid Tide (BS 5609:1986)	No effect
Reference Fuel	1 hour at 23°C	Very Slight Film Softening
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
Detergent Solution	8 hours at 65°C	No effect
Hydraulic Oil	24 hours at 23°C	No effect
Battery Acid	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.

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



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Storage

Shelf life (before application) Two years, out of direct sunlight between 15°C and 23°C and 30 to 70 % relative humidity

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. This product has been warranted to provide clean removability, under controlled conditions, up to a period of three years from a range of substrates. Clean removability is deemed with less than 30% adhesive residue when using heat and chemical removal methods. Exceptions to the removal warranty are those applied to the following: pre-existing graphics, paint which is not properly bonded to the substrate and custom paint applications. 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 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.

ISO 9001 · IATF 16949

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