



K42000 Series Gloss Calendered Digital Vinyl

These specially produced monomeric vinyl films have been developed for applications where excellent processing and digital print properties are required. The materials have optimum stability and light fastness and are ideal for indoor and outdoor applications. They are particularly suitable for exhibition displays, shop signs and advertising/promotional campaigns. They are available with a gloss finish (permanent adhesive). There are two products in the range:

K42001	Gloss Clear Monomeric	Permanent Adhesive
K42011	Gloss White Monomeric	Permanent Adhesive

CHARACTERISTIC	TEST METHOD	TYPICAL VALUE
Film Thickness	ISO 4591:1992	0.075mm
Adhesive Thickness	ISO 4591:1992	0.020mm
Adhesive Type		Clear Permanent Cross-Linking Acrylic
Release Liner		Single Sided PE
Storage		Two years, out of direct sunlight at 23°C and 50% humidity
Tensile	ISO 527:1996	> 24 Mpa
Elongation	ISO 527:1996	> 180%
Adhesion 20 min @ 180°	FINAT FTM1/Stainless Steel	550N/m (permanent)
Adhesion 24 hours @ 180°	FINAT FTM1/Stainless Steel	700N/m (permanent)
Static Shear (25 x 25mm)	FINAT FTM8/Stainless Steel	>16 hours
Dimensional Stability (150 x 150mm/48 hours/70°C)	FTM14/Aluminium	<0.75mm
Gloss at 20°	ASTM 523-89	>50% (Gloss)
Gloss at 60°	ASTM 523-89	
Flammability		Self Extinguishing
Artificial Weathering	QUV	>1000 hours
Weathering	Vertical Exposure/Mid Europe	
Black/White/Clear Colours		3 - 5 years
Rivet Testing	KPMF ST 22	2 - 4 years
Application Temperature	Clean, dry surface	No Cracking
Service Temperature		+8°C to 25°C
		-30°C to +80°C
Adhesion Properties to Various Substrates for 24 hours at 23°C/180° Peel (Permanent Adhesive)		
Aluminium - Untreated		950 N/Metre
Aluminium - Anodised		910 N/Metre
Stainless Steel		700 N/Metre
Chromed Steel		710 N/Metre
Polyurethane		460 N/Metre
Glass		650 N/Metre
Acrylic Sheet		650 N/Metre
ABS Sheet		610 N/Metre
Resistance to various liquids after application and conditioned for 24 hours at 23°C. Results examined 1 hour after test. (Unprinted Vinyl)		
Humidity	24 hours at 38°C and 100%	No Effect
Water (Distilled)	24 hours at 32°C	Slight Edge Lifting
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	Slight Edge Lifting
Hydraulic Oil	24 hours at 23°C	No Effect
Battery Acid	24 hours at 23°C	No Effect

Although we have good control of the colour production at KPMF, it is advisable to avoid using different batches of material for the same end application.

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). The above data shows typical properties and should not be taken as a guarantee for performance. Purchasers should determine the suitability of each product prior to its intended use. Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids etc. may eventually cause deterioration. Durability is based on middle European exposure conditions. Actual performance will depend on substrate preparation, exposure conditions and application of marking.

IMPORTANT

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.

WARRANTY

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.