



**K75400/K75500 Premium 100micron
Double Cast Vinyl - VWS IV
TECHNICAL & PERFORMANCE INFORMATION**

K75000

K75400 Gloss/K75500 Matt Premium Double Cast Vinyl – VWS IV (Airelease Liner)

VWS IV (Vinyl Wrapping System) is a range of premium quality cast PVC films specifically developed for vehicle wrapping. They are formulated using the latest advances in chemical and pigment technology to offer exceptional dimensional stability and long term durability. They are suitable for applications in outdoor and indoor environments, with the 100 micron double cast thickness offering excellent cutting and weeding properties. The combination of soft cast vinyl formulation and specific adhesive design offers excellent conformability into recesses and adhesion which allows the film to be removed using heat and/or chemicals up to a period of three years from a range of substrates subject to exceptions covered in the warranty.

Typical applications include total vehicle cover, vehicle graphics, signs and decal applications.

This range is available as:-	K75440 Gloss Magnetic Black	K75540 Matt Crystalline White
	K75441 Gloss Excelsior Blue	K75542 Matt Viper Green
		K75543 Matt Java Brown
		K75544 Matt Trenton Blue
		K75545 Matt Russet Red
		K75551 Matt Magnetic Black
		K75552 Matt Aurora Pearl

CHARACTERISTIC	TEST METHOD	VALUE
Film Thickness	ISO 4591:1992	0.100mm
Adhesive Thickness	ISO 4591:1992	0.025mm
Adhesive Type		Clear permanent Cross-Linking Acrylic
Release Liner		145gsm Double Sided PE Structured Liner
Storage		Two years, out of direct sunlight at 23°C and 50% humidity
Tensile	ISO 527:1996	>13.5 N/mm ²
Elongation	ISO 527:1996	>75%
Heating and Stretching the Film		140% (100mm stretched to 140mm)
Adhesion 20 mins/180°	FINAT FTM1/Stainless Steel	>440 N/Metre
Adhesion 24 Hrs/180°	FINAT FTM1/Stainless Steel	>535 N/Metre
Static Shear (25 x 25mm)	FINAT FTM8/Stainless Steel	>16 hours
Dimensional Stability (150 x 150mm/48 hours/70°C)	FTM14/Aluminium	
Gloss 60°	ASTM 523-89	<20 (Matt films) >85 (Gloss films)
Flammability		Self Extinguishing
Artificial Weathering	QUV	>1000 hours
Weathering	Vertical Exposure/Mid Europe	10-12 years
Rivet Testing	KPMF ST 22	No Cracking
Application Temperature	Clean, dry surface	+8°C to 25°C
Service Temperature		-40°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
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
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. 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.

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