



Data Sheet Premium Cast Vinyl VWS IV K75400/K75500 Series

Product Description

VWS IV (Vinyl Wrapping System) is a range of premium quality cast PVC films specifically developed for vehicle wrapping. Available in a selection of exciting finishes that includes solid gloss and matt colours, gleaming metallics, sparkling starlights, delicate pearlescents and spectacular iridescents that produce attention grabbing vehicle wraps. These premium cast products are formulated using the latest advances in chemical and pigment technology to offer exceptional dimensional stability and long term durability. 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).

Products available

K75403 Gloss Vengeance Red	100µ	K75443 Gloss Perfect Black	80µ
K75405 Gloss Indulgent Blue	100µ	K75444 Gloss Perfect White	80µ
K75407 Gloss Envious Green	100µ	K75546 Matt Perfect White	80µ
K75440 Gloss Magnetic Black	100µ	K75547 Matt Perfect Black	80µ
K75441 Gloss Excelsior Blue	100µ	K75548 Matt Lightning	80µ
K75505 Matt Iced Blue Titanium	100µ	K75550 Matt Welsh Slate	80µ
K75539 Siberian Pearl	100µ	K75561 Matt Elan Blue	80µ
K75540 Matt Crystalline White	100µ		
K75542 Matt Viper Green	100µ		
K75543 Matt Java Brown	100µ	K75464 Purple/Green Iridescent Gloss	85µ
K75544 Matt Trenton Blue	100µ	K75465 Purple/Black Iridescent Gloss	85µ
K75545 Matt Russet Red	100µ	K75466 Purple/Blue Iridescent Gloss	85µ
K75549 Anodised Bronze	100µ	K75492 Gold/Red Iridescent Gloss	85µ
K75551 Matt Magnetic Black	100µ	K75565 Purple/Black Matt Iridescent	85µ
K75552 Matt Aurora Pearl	100µ	K75566 Purple/Blue Matt Iridescent	85µ
		K75467 Purple / Blue Nebula	100µ
K75470 Morpheus Black Gloss	100µ		
K75472 Gold/White Starlight Gloss	110µ		
K75474 Pink/White Starlight Gloss	110µ		
K75476 Pacific Blue/White Starlight Gloss	110µ		
K75479 Copper/Black Starlight Gloss	110µ	K75482 Green/White Pearlescent Gloss	100µ
K75572 Gold/White Starlight Matt	110µ	K75484 Blue/White Pearlescent Gloss	100µ
K75574 Pink/White Starlight Matt	110µ	K75486 Indigo/White Pearlescent Gloss	100µ
K75576 Pacific Blue/White Starlight Matt	110µ	K75488 Magenta/White Pearlescent Gloss	100µ
K75571 Morpheus Black Matt	100µ	K75584 Blue/White Pearlescent Matt	100µ

Physical Characteristics

	TEST METHOD	TYPICAL VALUE
Film Thickness	ISO 4591:1992	See above
Elongation	ISO 527:1996	100µ >140% 80µ >140% Pearlescent, starlight & Iridescent vinyl's >70%
Dimensional Stability (150 x 150mm/48 hours/70°C)	FTM14/Aluminium	<0.5 mm
Gloss 60°	ASTM 523-89	Gloss >85 Matt <25



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Adhesive

Clear semi permanent Acrylic

Adhesive properties

Adhesive Thickness 18 mm Single side PE Printed black VWS/25 mm Double sided PE structured liner printed green Airelease

Adhesion to stainless steel 20 Mins/180° >350 N/Metre (Gloss and Matt)

Adhesion to stainless steel 24 Hrs/180° >535 N/Metre (Gloss and Matt)

Release Liner

Single side PE Printed black VWS/Double sided PE structured liner printed green

Widths

1524mm

Durability

Flammability Self-Extinguishing

Artificial Weathering Atlas Xenon Arc >1000 hours

Weathering - Gloss & Matt	Vertical Exposure/Mid Europe	Ongoing
Colours		Ongoing
Pearlescent		5-7 Years
Iridescent		Ongoing
Starlight		

Durability is based on middle European exposure conditions.

Service Temperature -40°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
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
Hydraulic Oil	24 hours at 23°C	No effect
Battery Acid	24 hours at 23°C	No effect



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Product Usage guide

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

Suitable for applications in outdoor and indoor environments, offering 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

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.

Issue 02 24/01/2017	PRODUCT DATA SHEET PREMIUM CAST VINYL VWS IV © Kay Premium Marking Films Ltd	Page 3 of 3
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