Product Data Sheet



K75000 Series Premium Cast Vinyl VWS IV Starlight, Frozen & Pearlescent

Product Description

VWS IV (Vinyl Wrapping System) is a range of premium quality cast PVC films specifically developed for vehicle wrapping. 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).

Recommended Uses

Vehicle wrapping

Features

- Colour shifting sparkling starlight, dramatic frozen and subtle pearlescent finishes
- Premium quality double cast PVC film construction
- Suitable for long term outdoor environments
- KPMF's Airelease technology enables bubble free flow out during installation

Face Film

100 – 110µm Premium Cast

Adhesive

- 18g/m² clear semi-permanent solventbased acrylic
- 25g/m² clear semi-permanent solventbased acrylic

Release Liner

- Single-sided PE printed VWS logo
- Double-sided PE structured printed Airelease logo
- Widths

1524mm

Durability

Up to 7 years outdoors (vertical exposure, climate zone 1)

Shelf Life

K75572 Gold/White Starlight Matt

K75574 Pink/White Starlight Matt

K75584 Blue/White Pearlescent Matt

K75575 Frozen Mystic Pink Matt

K75577 Frozen Emerald Matt

K75571 Morpheus Black Matt

K75573 Frozen Ruby Matt

K75576 Pacific Blue/White Starlight Matt

2 years (out of direct sunlight, between 15°C and 23°C, 30% to 70% relative humidity)

Products Available

- K75470 Morpheus Black Gloss
- K75472 Gold/White Starlight Gloss
- K75474 Pink/White Starlight Gloss
- K75476 Pacific Blue/White Starlight Gloss
- K75479 Copper/Black Starlight Gloss
- K75482 Green/White Pearlescent Gloss
- K75484 Blue/White Pearlescent Gloss
- K75486 Indigo/White Pearlescent Gloss
- K75488 Magenta/White Pearlescent Gloss 100µm

Physical	Characteristics

Film Thickness Elongation Dimensional Stability (48 hours/70°C) Test Method

ISO 4591:1992 ISO 527-3:2018 FTM14/Aluminium

100µm

110µm

110µm

110µm

110µm

100µm

100µm

100µm

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Typical Value

See above >75% <0.5 mm 110µm

110µm

110µm

100µm

100µm

100µm

100µm

100µm

Gloss 60°	ASTM D523-14 (2018)		Gloss >85 Matt <25			
20 minute 180º Peel	FTM1/Painted Steel			>350 N/m		
24 hour 180º Peel	FTM1/Painted Steel			>535 N/m		
Flammability				Self-exting	uishing	
Artificial Weathering	Xenon Arc			2000 hours		
Outdoor Weathering	Zone 1		Zone 2		Zone 3	
Gloss & Matt	<u>Vertical</u>	<u>Horizontal</u>	<u>Vertical</u>	<u>Horizontal</u>	<u>Vertical</u>	<u>Horizontal</u>
	7 years	3 years	5 years	2 years	3 years	1 year

	Florida/Arizona, Horizontal	> 2 years			
Temperature Range					
Application Temperature		Minimum +10ºC			
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			
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 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 +20°C

Product Warrantv

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.

