

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 solvent-based acrylic
- 25g/m² clear semi-permanent solvent-based 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

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

Products Available

▪ K75470 Morpheus Black Gloss	100µm	▪ K75572 Gold/White Starlight Matt	110µm
▪ K75472 Gold/White Starlight Gloss	110µm	▪ K75574 Pink/White Starlight Matt	110µm
▪ K75474 Pink/White Starlight Gloss	110µm	▪ K75576 Pacific Blue/White Starlight Matt	110µm
▪ K75476 Pacific Blue/White Starlight Gloss	110µm	▪ K75571 Morpheus Black Matt	100µm
▪ K75479 Copper/Black Starlight Gloss	110µm	▪ K75584 Blue/White Pearlescent Matt	100µm
▪ K75482 Green/White Pearlescent Gloss	100µm	▪ K75573 Frozen Ruby Matt	100µm
▪ K75484 Blue/White Pearlescent Gloss	100µm	▪ K75575 Frozen Mystic Pink Matt	100µm
▪ K75486 Indigo/White Pearlescent Gloss	100µm	▪ K75577 Frozen Emerald Matt	100µm
▪ K75488 Magenta/White Pearlescent Gloss	100µm	▪ K75578 Frozen Sapphire Matt	100µm

Physical Characteristics

	Test Method	Typical Value
Film Thickness	ISO 4591:1992	See above
Elongation	ISO 527-3:2018	>75%
Dimensional Stability (48 hours/70°C)	FTM14/Aluminium	<0.5 mm
Gloss 60°	ASTM D523-14 (2018)	Gloss >85 Matt <25

20 minute 180° Peel	FTM1/Painted Steel	>350 N/m
24 hour 180° Peel	FTM1/Painted Steel	>535 N/m
Flammability		Self-extinguishing
Artificial Weathering	Xenon Arc	2000 hours

Outdoor Weathering

Gloss & Matt	Zone 1		Zone 2		Zone 3	
	<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 +18°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
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

For best results application should be performed in a clean dry workshop at an ambient temperature of 18°C - 24 °C

During the application of gloss special effect films, care should be taken not to apply too much heat and / or overstretch the vinyl as this could result in a reduction in gloss giving a matt appearance".

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.