



Data Sheet K75500 Premium Metallic Matt Cast Vinyl VWS IV

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).

Features

- Vibrant Matt Colours
- Premium quality cast PVC film construction
- Suitable for long term outdoor environments
- KPMF's Airelease technology enables bubble free flow out during installation

Products available

| | | | |
|----------------------------------|-------|------------------------------------|-------|
| K75501 Matt Iced Silver Titanium | 80µm | K75548 Matt Lightning | 80µm |
| K75505 Matt Iced Blue Titanium | 100µm | K75549 Matt Anodised Bronze | 100µm |
| K75506 Matt Iced Red Titanium | 100µm | K75550 Matt Welsh Slate | 80µm |
| K75539 Matt Siberian Pearl | 100µm | K75551 Matt Magnetic Black | 100µm |
| K75540 Matt Crystalline White | 100µm | K75552 Matt Aurora Pearl | 100µm |
| K75542 Matt Viper Green | 100µm | K75554 Matt Autumn Fire | 100µm |
| K75543 Matt Java Brown | 100µm | K75556 Matt Nero Flare | 80µm |
| K75544 Matt Trenton Blue | 100µm | K75561 Matt Elan Blue | 80µm |
| K75545 Matt Russet Red | 100µm | K75568 Matt Iced Amethyst Titanium | |
| | | | |

Physical Characteristics

| | TEST METHOD | TYPICAL VALUE |
|--|-----------------|---------------|
| Film Thickness | ISO 4591:1992 | See above |
| Elongation | ISO 527:1996 | >140 % |
| Dimensional Stability (150 x 150mm/48 hours/70°C) | FTM14/Aluminium | <0.5 mm |
| Gloss 60° | ASTM 523-89 | Matt <15 |

Adhesive

Clear semi permanent cross linking acrylic solvent based adhesive

Adhesive properties

| | | |
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Adhesive Thickness 18g/m² Single side PE Printed black VWS
25g/m² Double sided PE structured liner printed green Airelease

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

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

Release Liner

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

Widths

1524mm

Durability

| | Zone 1 | | Zone 2 | | Zone 3 | |
|------|----------|------------|----------|------------|----------|------------|
| | Vertical | Horizontal | Vertical | Horizontal | Vertical | Horizontal |
| Matt | 7 years | 3 years | 5 years | 2 years | 3 years | 1 year |

Escalated Weathering

Flammability Self-Extinguishing

Artificial Weathering Atlas Xenon Arc 2000 hours

Weathering - Matt Horizontal Exposure/Florida and Arizona 2 Years - ongoing

Service Temperature -40°C to 90°C

Escalated weathering is based on Florida and Arizona exposure conditions

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 (100%) | 24 hours at 38°C (100°F) | No effect |
| Water (Distilled) | 24 hours at 32°C (90°F) | No effect |
| Diesel Fuel | 1 hour at 23°C (73°F) | No effect |
| SAE Motor Oil | 24 hours at 23°C (73°F) | No effect |
| Antifreeze/Water (1:1) | 24 hours at 23°C (73°F) | No effect |
| Hydraulic Oil | 24 hours at 23°C (73°F) | No effect |
| Battery Acid | 24 hours at 23°C (73°F) | 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 +20°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.

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