Product Data Sheet

K74000/K75100 Series Premium Speciality Cast Vinyl

Product Description

Premium quality cast vinyl films designed for specific applications, offering unique properties and exceptional characteristics.

K74100 Series Luminescent Cast Vinyl

Designed for use in all emergency sign and marking applications requiring excellent retained brightness. Printable, conformable and durable, K74100 Series meets the requirements of DIN 67510PI for luminosity.

K74000 Series Fluorescent Cast Vinyl

Designed for use in all exterior marking and signage applications where fluorescent properties are required. They are printable, conformable and durable.

K74500 Series Cast Ultra Destruct Vinyl (UDS)

Developed for use in all areas where tamper evidence, security and durability of information is paramount. Offering increased adhesion properties, the K74500 Series gives excellent tamper proof properties even on typical, low energy surfaces. The destructibility of these films has been designed to enable conversion at good press speeds with the product becoming tamper-proof within 20 minutes of application. Testing is advised before use.

K75100 Glitter Cast Vinyl

A range of bright glittering products designed for use in all exterior marking and signage applications where an additional sparkle effect is required. These films can be applied to smooth, flat and gently contoured surfaces.

K74200 Series Cast Polyvinyl Difluoride

Premium quality cast polyvinylidene fluoride films are intended for use in all exterior aircraft and automotive applications for decals and vacuum formed parts. The films have the ultimate properties for outdoor durability. Very conformable, the K74200 Series can be used on smooth, textured and contoured surfaces. End users have include OEMs aftermarkets.

Recommended Uses

K74100 Series Luminescent

- Exit signs
- Graphics on emergency equipment

K74000 Series Fluorescent Cast Vinyl

- Police and Emergency vehicles
- Graphics on trucks, recreational vehicles and automobiles

K74500 Series Cast Ultra Destruct Vinyl (UDS)

- Security seals of utility meters

Face Film

50µm – 130µm Speciality Cast

Adhesive

- K74100, K74000: 40g/m² white / grey
- K74500: 18g/m² clear, 25g/m² clear
- K75100: 25g/m² clear
- K74200: No adhesive

Release Liner

- K74100, K74000, K75100: double-sided PE – printed grey KPMF logo
- K74500: super calendared kraft

Widths

1220mm

Durability

(Vertical Exposure/Mid Europe)

- K74100: 3 years
- K74000: 6/12 months
- K74500: 4-5 years
- K75100: 4-5 years
- K74200: 4-5 years

Shelf Life

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

- Identification of automotive and other high value parts
  Automotive safety information labels
- Tagging of electronic components
- General packaging seals for sensitive products

K75100 Glitter Cast Vinyl

- Graphics on equipment
- Signage

K74200 Series Cast Polyvinyl Difluoride

- Exterior aircraft and automobile decals and vacuum-formed parts
- Badges and graphics by OEMs for aircraft, trucks, recreational vehicles & automobiles

Products Available

- K74111 White Luminescent
- K74032 Yellow Fluorescent
- K74044 Orange Fluorescent
- K74057 Red Fluorescent
- K74056 Fuchsia Fluorescent
- K74072 Green Fluorescent
- K74501 Clear Gloss UDS
- K74511 White Gloss UDS
- K74512 White Matt UDS
- K75150 Black Glitter
- K75151 Red Glitter
- K75152 Pink Glitter
- K75153 Forest Green Glitter
- K75154 Turquoise Glitter
- K75155 Royal Blue Glitter
- K75156 Dark Blue Glitter
- K75157 Lilac Glitter
- K75158 Silver Glitter
- K75159 Gold Glitter
- K74201 Clear Gloss PVDF
- K74292 Pearl Gloss PVDF
- K74202 Clear Low Gloss Satin PVDF

Physical Characteristics

	Test Method	Typical Value
Film Thickness	ISO 4591:1992	K74100: 130µm K74000: 100µm K74500: 50µm K75100: 110µm K74200: 50µm
Elongation	ISO 527-3:2018	K74100: >75% K74000: >75% K74500: <5% K75100: >75% K74200: >180%
Dimensional Stability *(48 hours/70°C)*	FTM14/Aluminium	<0.5mm
Gloss 60°	ASTM D523-14 (2018)	K74200: >95 Others: >85
20 minute 180º Peel	FTM1/Painted Steel	K74100: >380N/m K74000: >380N/m K74500: Film breaks K75100: >435N/m
24 hour 180º Peel	FTM1/Painted Steel	K74100: >530N/m K74000: >530N/m K74500: Film breaks K75100: >450N/m
Flammability		Self-extinguishing
Artificial Weathering	Xenon Arc	K74100: >1500 hours

		K74000: K74044: >250 hours K74056: >250 hours K74072: >250 hours K74032: >500 hours K74057: >500 hours K74500: >2000 hours K75100: >2000 hours K74200: >2000 hours
Outdoor Weathering	Vertical Exposure/Mid Europe	K74100: 3 years K74000: K74044: 6 months K74056: 6 months K74072: 6 months K74032: 12 months K74057: 12 months K74500: 4-5 years K75100: 4-5 years K74200: 4-5 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 application for outdoor durability, for graphics on original equipment identification, building signage and vehicle graphics to include trucks, recreational vehicles and automobiles. They are also widely used for train liveries, boats and as temporary livery on aircraft.

The materials are very conformable, being able to be used on smooth, textured and contoured surfaces, and are available in a wide range of colours including metallic.

Custom colour matching is offered to suit specific requirements. (Subject to minimum quantities).

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

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.

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 substate 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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