# **Product Data Sheet**



# K40000 Series

## **Product Description**

These specially produced monomeric vinyl films have been developed for computer cutting applications where excellent processing properties are required.

The materials have optimum stability and light fastness and are ideal for indoor and outdoor applications. Available with a gloss finish and permanent adhesive.

#### **Recommended Uses**

- Exhibition displays
- Shop signs
- Advertising/promotional campaigns

#### **Products Available**

- K40011 White Gloss
- K40021 Black Gloss

#### Face Film

75µm Monomeric Calendared

#### Adhesive

20g/m<sup>2</sup> clear permanent solvent-based acrylic

#### Release Liner

Kraft

#### Widths

1220mm

## Durability

Up to 5 years outdoors (vertical exposure, mid-Europe)

**Typical Value** 

#### Shelf Life

2 years

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

### **Physical Characteristics**

|                                       |                                | , Abroan a and a   |
|---------------------------------------|--------------------------------|--------------------|
| Film Thickness                        | ISO 4591:1992                  | 75µm               |
| Elongation                            | ISO 527-3:2018                 | >180%              |
| Dimensional Stability (48 hours/70°C) | FTM14/Aluminium                | 0.5mm              |
| Gloss at 60°                          | ASTM D523-14 (2018)            | >50                |
| 20 minute 180º Peel                   | FTM1/Painted Steel             | >300 N/m           |
| 24 hour 180º Peel                     | FTM1/Painted Steel             | >400 N/m           |
| Flammability                          |                                | Self-extinguishing |
| Artificial Weathering                 | QUV                            | 1000 hours         |
| Outdoor Weathering                    | Vertical Exposure / Mid Europe | 3 – 5 years        |

**Test Method** 

#### **Temperature Range**

Application Temperature Minimum 10°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 Slight Edg

Water (Distilled)

24 hours at 32°C

Diesel Fuel

1 hour at 23°C

No Effect

24 hours at 32°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**

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.

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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