Product Data Sheet



K85000 Series Clear Coated Reach Compliant Aliphatic

Polyurethane

Product Description

This premium quality extruded aliphatic polyurethane film has been specially developed for use in the automotive and other industries which require a self-adhesive material to reduce corrosion, stone chipping and scratching.

The film is transparent and has a specially developed High Tack adhesive system which makes it suitable for use over painted surfaces.

The clear coating on the top surface provides outstanding gloss and the enhanced exterior durability that protects the painted surfaces of the vehicle from minor scuffs, scratches, damage caused by stone chips and environmental elements.

Suitable for use on specific exposed areas including car bonnets, bumpers or for full vehicle coverage.

Due to the nature of the clear coat, it is unlikely that any printing inks will adhere to the surface.

Minimum order quantities may apply.

Recommended Uses

- Protection against stone chips, scratches and environmental damage
- Full vehicle coverage
- Exposed areas such as car bonnets and bumpers

Products Available

- K85205 200μm with 20μm Clear Coat, 60g/m² adhesive
- K85255 250μm with 20μm Clear Coat, 60g/m² adhesive

Face Film

220μm – 270μm Clear-coated Aliphatic Polyurethane

Adhesive

60 g/m² permanent solvent-based acrylic

- Release Liner
 - 75µm polyester
- Widths

1245mm

Durability

Expected up to 10 years outdoor exposure based upon weathering testing completed to date (see below) (vertical exposure, mid-Europe)

Shelf Life

2 years

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

Where the film is supplied without protective film attached, the shelf life under the same conditions above is reduced to three months

Physical Characteristics

	Test Method	Typical Value
		K86205
Film Thickness	ISO 4591:1992	220µm
Elongation	ISO 527-3:2018	>250 %
Dimensional Stability (48 hours/70°C)	FTM14/Aluminium	<1.0mm
Gloss 60°		90
20 minute 180º Peel	FTM1/Stainless Steel	>450 N/m
24 hour 180º Peel	FTM1/Stainless Steel	>450 N/m

	Self-extinguishing
Xenon Arc	6000 hours
Vertical Exposure/Mid Europe Florida	Expected up to 10 years outdoors exposure 12 months
Arizona	12 months
Emmaqua	3 Years
	Minimum +10ºC
	-40ºC to +90ºC
	No blistering visible shrinkage or edge lifting
1000 Cycles, 500g load, CS-17 Wheel	Does not exceed approved sample
SAE J400 8.5 PT of gravel RT:	Does not exceed approved sample
	Xenon Arc Vertical Exposure/Mid Europe Florida Arizona Emmaqua 1000 Cycles, 500g load, CS-17 Wheel SAE J400 8.5 PT of gravel RT:

Product Usage Guide

. ...

These premium quality extruded aliphatic polyurethane film has been specially developed for use in the automotive and other industries which require a self-adhesive material to reduce corrosion, stone chipping and scratching.

The film has a specially developed high tack adhesive system which makes it suitable for use over painted surfaces.

The clear coating on the top surface provides outstanding gloss and the enhanced exterior durability that protects the painted surfaces of the vehicle from minor scuffs, scratches, damage caused by stone chips and environmental elements.

The materials are conformable and suitable for use on specific exposed areas including car bonnets, bumpers, or for full vehicle coverage. 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 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.

Product Warranty

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.

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.