K82000 Series Hi Gloss Polyurethane - Aliphatic

These premium quality extruded aliphatic polyurethane films have been specially developed for use in the automotive and other industries which require a self adhesive material to reduce corrosion, stone chipping and scratching. They have been clear coated on the top surface to provide outstanding gloss and enhanced exterior durability. The films are transparent and have a specially developed Hi Tack aggressive adhesive system which makes them suitable for use over painted surfaces. Due to the nature of the clear coat, it is unlikely that any printing inks will adhere to its surface.

These films are available as:

K82155	150 micron with 50gsm of adhesive
K82205	200 micron with 60gsm of adhesive
K82305	300 micron with 60gsm of adhesive

All materials are available with a paper or antistatic polyester liner. Other thicknesses available upon request.

CHARACTERISTIC	TEST METHOD	TYPICAL VALUE K82205
Film Thickness	ISO 4591:1992	See above
Adhesive Thickness	ISO 4591:1992	See above
Adhesive Type		Hi Tack Self Cross Linking Acrylic
Clearcoat Thickness	ISO 1491:1992	0.025mm
Release Liner		Stayflat Kraft – 140gsm Antistatic polyester - 75µm
Tensile	ISO 527:1996	> 20 N/mm²
Elongation	ISO 527:1996	> 250%
Static Shear	FINAT FTM8/Painted Steel	> 2 hours
Adhesion 2 hrs/180°/ 23°C	FINAT FTM1/Painted Steel	250 N/metre
Adhesion 24 Hrs/180°/ 23°C	FINAT FTM1/Painted Steel	350 N/metre
Dimensional Stability 150 x 150mm/48 hours/ 70ºC	FINAT FTM14/Painted Steel	< 1.0mm
Heat Age 250 hrs/180°/ 80°C	No Detrimental Effect or colour change in Excess of 4-5 to ISO 105:A02 Grey Scale	>350 N/metre
Condensing Humidity 250 hrs/180°/38°C/ 98% RH	No Detrimental Effect or colour change in Excess of 4-5 to ISO 105:A02 Grey Scale	> 300 N/metre
Salt Spray 250 hrs/180°	No Detrimental Effect or colour change in Excess of 4-5 to ISO 105:A02 Grey Scale	>300 N/metre
Environmental Cycle 5 cycles (16 hrs/ 80°C, 24 hrs/38°C/ 98% RH, 8hrs/-30°C)/180°	No Detrimental Effect or colour change in Excess of 4-5 to ISO 105:A02 Grey Scale	>325 N/metre
Fadoemeter 250hrs/180°	No Detrimental Effect or colour change in Excess of 4-5 to ISO 105:A02 Grey Scale	>325 N/metre
Atlas Xenon Arc 2000 hrs	FINAT FTM14/Painted Steel	Pass - Vertical
Arizona 24 months	FINAT FTM14/Painted Steel	Pass - 45° from Horizontal
Arizona 24 months	FINAT FTM14/Painted Steel	Pass - 90° from Horizontal
Florida 24 months	FINAT FTM14/Painted Steel	Pass – 5 ° from Horizontal
Gravel Resistance 2.4 litres	No separation, break through or delamination	Pass 48 hrs/23°C Pass 48 hrs/23°C and 4 hours/-30°C Pass – 4 hrs/-30°C
Abrasion Resistance	No separation, break through or delamination	Pass – 1000 cycles/500grms/C17 wheel
Acid Resistance	No discoloration in excel of 4.5 to ISO 105:A02 Greyscale	Pass – 24 hrs immersion
Unleaded Gasoline	No Detrimental effect	Pass - Drip test 15 minutes
Solvent wipe	No Detrimental effect	Pass - Isopropyl alcohol Pass - Unleaded Gasoline Pass - Diesel Fuel Pass - Naptha

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). The above data shows typical properties and should not be taken as a guarantee for performance. Purchasers should determine the suitability of each product prior to its intended use. Prolonged exposure to high and low temperatures in the presence of chemicals such as solvents, acids etc. may eventually cause deterioration. Durability is based on middle European exposure conditions. Actual performance will depend on substrate preparation, exposure conditions and application of marking.

IMPORTANT

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.

WARRANTY

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.