

This technical data refers to the following Lighthouse products:

### CPMSP22, 3M LSE Polyester – Low Surface Energy

#### DESCRIPTION

Gloss white polyester film with a specialist permanent acrylic adhesive for use with the CPM-100 systems.

Polyester is a durable and extremely dimensionally stable film. The specialist permanent acrylic adhesive provides a high strength adhesion on a variety of surfaces including textured, grained and structured low surface energy plastics such as Polypropylene (PP), low density Polyethylene (LDPE), mineral filled and fibre reinforced PP and Polyamide (PA) composites.

This UL and cUL recognised product offers good chemical and temperature resistance up to +150°C and is ideal for marking reinforced plastics and structures composites for automotive and industrial applications.

#### CONSTRUCTION

Face film:	50 µm thick Polyester
Adhesive:	65g/m <sup>2</sup> Acrylic based adhesive.
Liner:	Highly stable 135 gsm white Kraft paper.

#### TECHNICAL DATA

Thickness (Typical values)	
Film	50 micron
Adhesive	65 g/m <sup>2</sup>
Liner	17 microns / 135 gsm

#### ADHESION DATA

Adhesion (Typical values)				
FTM 2				
90° Peel adhesion tested using FINAT Test Procedure (300mm/min)				
23°C and 50% Relative Humidity				
Substrate	Mineral Filler	Surface Structure	90° Peel N/25mm	
Stainless Steel		Smooth	37.8	
Polyamide	PA6	None	38.5	
	PA6	MR30	31.5	
	PA6	MR30	Rz 50µm	12.2
	PA6	MR30	Rz 300µm	9.5
Polypropylene	PP	None	35.7	
	HCPP	None	38.5	
	PP	MR20	Smooth	37.2
	PP	MR20	Rz 50µm	13.0
	PP	MR20	Rz 300µm	9.5
	PP	TV20	Smooth	31.5
	PP	TV20	Rz 40µm	24.0
	Other Polyolefins			
POM	None	Smooth	34.5	
PP-EPDM	TD10	Smooth	40.0	
LDPE	None	Smooth	40.0	

### ADHESION DATA (Continued)

<b>Adhesion</b> (Typical values) 72 Hours at 70°C	
<b>Substrate</b>	<b>90° Peel N/25mm</b>
Stainless Steel	37.0
ABS	22.8
Polypropylene	33.1

<b>Minimum Application Temperature</b>	+15°C
<b>Service Temperature</b>	-40°C to +150°C
<b>Shelf Life</b> (20°C – 50% relative humidity)	2 years Stored at 21°C and ±50% relative humidity.
<b>Compliance</b>	UL and cUL recognised. File No. MH18072    Descriptor 92200 RoHS REACH
<b>Compatible Ribbons for Printing</b> Speciality Resin Ribbons. UL recognised when used in combination with this product.	CPMSR40, CPMSR42, CPMSR43, CPMSR44, CPMSR60

### IMPORTANT NOTICE

All Lighthouse products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects.

Published information concerning Lighthouse products is based on research, which the Company believes to be reliable, although such information does not constitute a warranty.

Because of the variety of uses of Lighthouse products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use. We recommend the purchaser conducts their own testing to determine the suitability for their required application. The purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages.

All specifications are subject to change without prior notice.