

This technical data sheet refers to the following Lighthouse product(s):

CPMSP14, 3M Clear Polyester

PHYSICAL PROPERTIES

Not for specification purposes (Calipers are nominal values)

| | |
|-------------------|---------------------------------|
| Face stock | 50 micron gloss clear polyester |
| Adhesive | 20 micron acrylic |
| Liner | 140 gsm kraft |

KEY FEATURES

- Facestock is top coated for thermal transfer printing and provides durability in harsh environments. Lighthouse speciality resin ribbons are recommended for optimum durability.
- Adhesive has excellent quick tack and also bonds well to a wide variety of substrates including metals, high surface energy (HSE) plastics and low surface energy (LSE) plastics. It is ideal for applications requiring high initial adhesion especially to LSE plastic surfaces.
- UL and cUL recognised (File Number MH18072) – **Descriptor: 7861E**

APPLICATION IDEAS

- Barcode labels and rating plates.
- Property identification and asset labelling in harsh environments.
- Warning, instruction and service labels for durable goods.

PERFORMANCE CHARACTERISTICS

Not for specification purposes

Standard Test Conditions are 23°C and 50% Relative Humidity

180° Peel Adhesion tested using FINAT Test Procedure FTM 1 (300mm/min)

90° Peel Adhesion tested using FINAT Test Procedure FTM 2 (300mm/min)

| Adhesion | 20 Minutes at Standard Conditions | | 72 Hours at Standard Conditions | |
|------------------------|-----------------------------------|--------------------|---------------------------------|--------------------|
| | 180° Peel N/25mm | 90° Peel N/25mm | 180° Peel N/25mm | 90° Peel N/25mm |
| Stainless Steel | 15.1 | 10.6 | 22.9 | 13.6 |
| ABS | 14.1 | 10.2 | 20.6 | 12.6 |
| Polycarbonate | 15.4 | 11.1 | 20.5 | 13.2 |
| Polypropylene | 14.9 | 10.3 | 17.3 | 10.8 |

| Adhesion | 72 Hours at 70°C | | 72 Hours at - 40°C | |
|------------------------|---------------------|--------------------|---------------------|--------------------|
| | 180° Peel N/25mm | 90° Peel N/25mm | 180° Peel N/25mm | 90° Peel N/25mm |
| Stainless Steel | 21.8 | 14.1 | 20.2 | 13.1 |
| ABS | 20.9 | 14.4 | 18.2 | 13.6 |
| Polycarbonate | 20.1 | 14.4 | 18.9 | 13.1 |
| Polypropylene | 12.3 | 8.3 | 17.1 | 11.9 |

| Adhesion | 72 Hours at 40°C and 95% RH | |
|------------------------|-----------------------------|--------------------|
| | 180° Peel N/25mm | 90° Peel N/25mm |
| Stainless Steel | 22.6 | 16.0 |
| ABS | 17.1 | 12.2 |
| Polycarbonate | 16.6 | 11.4 |
| Polypropylene | 15.4 | 10.3 |

Liner Release tested using FINAT Test Procedures
FTM 3 (180° removal of liner from face material at 300mm/min)
FTM 4 (180° removal of liner from face material at 10m/min)

| Liner Release | Rate of Removal | Release Force | Units |
|---------------|-----------------|---------------|---------|
| FTM 3 | 300 mm per min | 11.2 | cN/50mm |
| FTM 4 | 10 m per min | 5.4 | cN/25mm |

Temperature resistance of label applied to stainless steel.
Other substrates should be tested as per application

| | |
|--|--------------|
| Service Temperature | -40 to 150°C |
| Minimum Application Temperature | 5°C |

PROCESSING

| | |
|-------------------------------|--|
| Printing | Facestock is top coated for improved ink receptivity and is designed for thermal transfer printing with Lighthouse speciality resin ribbons. |
| Packaging | Finished labels should be stored in plastic bags. |
| Special Considerations | For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent. NOTE: When using solvents, read and follow the manufacturer's precautions and directions for use. For best bonding conditions, application surface should be at room temperature or higher. Low temperature surfaces, below 5°C can cause the adhesive to become so firm that it will not develop maximum contact with the substrate. Higher initial bonds can be achieved through increased rubdown pressure. |
| Storage | Store at room temperature conditions of 21°C and 50% relative humidity. |
| Shelf Life | 24 months from date of dispatch, when stored in the original packaging at 21°C & 50% relative humidity. |

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, and 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.

