

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

CPMSP51 & CM5031, 3M Silver/Grey Polyester

PHYSICAL PROPERTIES

Not for specification purposes (Calipers are nominal values)

Face stock	50 micron platinum silver polyester
Adhesive	46 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 designed to provide excellent adhesion to high and low surface energy substrates (plastics, metals, painted metals and powder coatings), combined with excellent temperature and chemical resistance.
- ☐ 46 micron adhesive coat weight gives excellent adhesion to textured surfaces.
- ☐ UL and cUL recognised (File Number MH18072) – **Descriptor:** 7872EC

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	23.1	20.4	29.4	24.6
ABS	20.3	15.3	24.6	20.1
Polycarbonate	22.4	16.3	26.4	20.5
Polypropylene	21.2	16.0	22.6	19.9

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	28.0	25.5	27.1	25.6
ABS	25.1	18.0	23.2	24.8
Polycarbonate	23.7	21.4	26.6	23.8
Polypropylene	17.0	10.8	23.4	21.7

Adhesion	72 Hours at 40°C and 95% RH	
	180° Peel N/25mm	90° Peel N/25mm
Stainless Steel	26.8	24.5
ABS	21.1	23.8
Polycarbonate	18.9	23.8
Polypropylene	23.9	19.5

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	18.9	cN/50mm
FTM 4	10 m per min	9.0	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	<p>For maximum bond strength, the surface should be clean and dry. Isopropyl alcohol is a typical cleaning solvent.</p> <p>NOTE: When using solvents, read and follow the manufacturer's precautions and directions for use.</p> <p>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.</p>
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.

