

Clear Vinyl Label Material

57836

Technical Data Sheet

Temporary

Product Description 3M™ 57836 is a durable 2.4mil, glossy clear vinyl label designed for making pictorial and/or print design or messages (e.g. labels, decals, etc) , and provides high adhesion on a variety of surfaces including high surface energy (HSE) plastics and metals. It can be used as self laminating cable label and well as flag cable label.

Construction (Calipers are nominal values.)

Facestock	Adhesive	Liner
2.4 mil (60 micron) Clear Vinyl Film	0.8 mil (20 micron) Acrylic	130g PCK liner

Features

- Calandar vinyl facestock provides excellent printing capability for thermal transfer printing, letterpress printing and flexographic printing. The facestock resists degradation from scuffing, chemicals, moisture, and wide temperature fluctuations;
- 2.4mil Calandar vinyl facestock provides excellent conformability. The product can be used as self-laminating cable label and flag cable label;
- Permanent acrylic pressure sensitive adhesive provide good adhesion to diversity metal, high surface energy plastic (HSE) surfaces and PVC surface;
- 130gsm PCK liner assures consistent die cutting and excellent layflat.

Typical Physical Properties

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

Adhesion: 180° peel test procedure is ASTM D 3330

Surface	Initial Peel Strength (10 Minute Dwell/RT)	
	Oz./In.	N/ mm
Stainless Steel	44	0.49
Polypropylene	20	0.22
Polycarbonate	49	0.55
ABS	45	0.49

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	Conditioned for 24hr at Room Temperature 72°F (22°C)	
Surface	Oz./In.	N/ mm
Stainless Steel	48	0.54
Polypropylene	22	0.25
Polycarbonate	52	0.58
ABS	43	0.47

Tensile strength and elongation: ASTM D1000.

Tensile Strength, Mpa	25.5
Elongation, %	180

Liner Release

Product	Rate of Removal	Gram/Inch	N/100mm
3M™ Clear Vinyl	90 inch/minute	8.1	0.31
Tape	30 inch/minute	10.6	0.41

Environmental Performance

Note: The following technical information and data should be considered representative or typical only and should not be used for specification purposes.

The properties defined are based on four hour immersions at room temperature (72°F/22°C) unless otherwise noted. Samples were applied to stainless steel panels 24 hours prior to immersion and were evaluated one hour after removal from the solution for peel adhesion. Adhesion measured at 180° peel angle (ASTM D 3330) at 12 inches/minute.

Chemical Resistance:

	Appearance	Edge Penetration
Chemical	Visual	Millimeters
Isopropyl Alcohol	No change	1
Water for 48 hours	No change	0
pH 4	No change	0
pH 10	No change	0

* 57836 is not recommended for use in harsh organic solvents such as methyl ethyl ketone, acetone, or 1,1,1-trichloroethane

Temperature Resistance:

High service temperature 30 days at 70°C (158°F)	No visible effect
Low service temperature 30 days at -20°C (-22°F)	No visible effect
Humidity resistance 30 days at 37°C(100°F),95% R.H	No visible effect
UV resistance 30 days in UV light chamber	No visible effect
Weatherability 30 days QUV	No visible effect

Application

For maximum bond strength, the surface should be clean and dry. Typical cleaning solvents are heptane and isopropyl alcohol.*

For best bonding conditions, application surface should be at room temperature or

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higher. Low temperature surfaces, below 50°F (10°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.

*When using solvents, read and follow the manufacturer's precautions and directions for use.

Processing

Printing

Facestock owns good ink receptivity and is suitable diverse printing method such as thermal transfer printing, flexographic printing and letterpress printing.

Die Cutting

Rotary die cutting is recommended. Small labels should be evaluated carefully. Winding tensions should be kept at a minimum to help prevent the adhesive from oozing.

Package

Finished labels should be stored in plastic bags.

Storage and Shelf life:

Two years from date of manufacture if store at room temperature conditions of 72°F (22°C) and 50% relative humidity.

Product Use

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