

PRODUCT DATA SHEET

Avery Dennison[®] 4900 and 4940 QM Apolar

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Introduction

Avery Dennison 4900/4940 QM Apolar are high performance white/ transparent quality cast films with a specially developed adhesive to provide excellent bond on substrates like polyethylene and polypropylene. Due to its high tack, Avery Dennison 4900/4940 QM Apolar can also provide better bond to slightly structured surfaces and galvanized steel.

Conversion

Screen printing is recommended. Avery Dennison 4900/4940 QM can also be die-cut using high quality steel rule dies.

Recommendations

- » On polyethylene and polypropylene surfaces such as chemical containers, machine parts, surfboards, petrol cans, air filters, etc.
- » Rough surfaces such as sandblasted and/or ground metals.
- » Durable promotional and point of sale signs, labels and emblems.
- » Nameplates, identification markings, schematics and instruction panels for machinery.
- » Structured aluminium caravan surfaces.

Features

- » Outstanding adhesion to apolar and rough surfaces.
- » Excellent dimensional stability and printability.
- » Outstanding outdoor exposure performance.
- » Superior conformability and adhesion.
- » Excellent application at low temperatures.



Face Film

Premium quality, 50 micron white/ transparent cast vinyl film



Adhesive

Permanent, acrylic based, specially formulated for adhesion to apolar and rough surfaces



Backing

One side coated white kraft paper, 140 g/m2



Durability

Up to 7 years outdoor (vertical exposure)



Shelf Life

2 years stored at 22°C/50%RH

Physical Characteristics

	Test method ¹	Results
Product		
Caliper, facefilm (micron)	ISO 534	50
Gloss (%)	ISO 2813, 20°	50%
Dimensional stability (mm max.)	DIN FINAT FTM 14	0.4
Shelf life (years)	Stored at 22° C/50-55 % RH	2
Durability ² (years)	Vertical exposure, zone 1	7
Adhesive		
Tensile strength (kN/m)	DIN ISO 527-3	1.1
Elongation (%)	DIN ISO 527-3	25%
Adhesion, initial (N/m)	FINAT FTM-1, stainless steel	600
Adhesion, ultimate (N/m)	FINAT FTM-1, stainless steel	800
Adhesion on special substrates like (N/m): LDPE, HDPE, Polypropylene, Polyurethane		500
ABS, Aluminium, Nylon, Acrylic paint		600
Flammability		Self-extinguishing
Temperature range		
Application temperature (Minimum: °C)		+10
Service temperature (°C to +°C)		-50 to +110
Chemical properties		
Humidity resistance	500 hours exposure	No effect
Corrosion resistance	120 hours exposure	No contribution to corrosion
Water resistance	48 hours immersion	No effect
Chemical resistance	Mild acids	No effect
	Mild alkalis	No effect
Sea water resistance	BS 5609:1986 section 2	No effect
	3 months immersion	
Solvent resistance	Applied to aluminium	No effect
oils, greases, aliphatic solvents, motor oils, heptane, kerosene and JP-4 fuel		

Important

Information on physical and chemical characteristics and values in this document are based upon tests we believe to be reliable and do not constitute a warranty. They are intended only as a source of information and are given without guarantee and do not constitute a warranty. Purchasers should independently determine, prior to use, the suitability of this material to their specific use.

All technical data are subject to change. In case of any ambiguities or differences between the English and foreign versions of this document, the English version shall be prevailing and leading.

1) Test methods: More information about our test methods can be found on our website.

2) Durability: The durability is based on middle European exposure conditions. Actual performance life will depend on substrate preparation, exposure conditions and maintenance of the marking. For instance, in the case of signs facing south; in areas of long high temperature exposure such as southern European countries; in industrially polluted areas or high altitudes, exterior performance will be decreased.

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