Avery Dennison Durables

Materials that perform and last

The right product for your application

Avery Dennison offers a wide range of different face materials and adhesive technologies to help you meet your customer's application requirements cost-effectively. Flexible service offerings mean you can buy exactly the right amount of product you need.

The challenge

Avery Dennison materials will deliver consistent performance in the harshest application conditions:

- excellent initial tack
- adhesion even to low surface energy materials
- excellent printability
- resistance to chemicals, heat, UV and other environmental or application challenges

Outstanding adhesive technology

Selecting the right durables labelling performance begins with adhesives that offer a solution for virtually any surface, with applications that range from identification, information and tracking through to branding and functional uses.

A choice of many different adhesive technologies means that both technical and market-driven challenges can be met more easily, whether you are designing cost-effective and straightforward applications or high-performing speciality products.

Proven performance in different market segments

Price expectations vary from one market segment to the other, and so do technical requirements for identification, warning and tracking labels in the technical industry.

In automotive applications, meeting OEM standards with highly resistant label materials is key. By contrast, in the electronics and appliance industries, technical requirements are typically lower but the price plays a bigger role. Avery Dennison supplies a wide range of materials, meeting different expectations.

Our local Technical Sales Support team, backed up by the experienced Durables Business team, will help you to select the right product for your customer's application, balancing cost precisely against performance criteria.

Many Avery Dennison products have been tested and are compliant to UL and CSA standards. In addition a number of automotive OEM standards have been achieved across a selected range of products.

LABEL MATERIALS FOR AUTOMOTIVE APPLICATIONS

Labels in automotive applications are used in three areas: interior, exterior and under-the-hood. They have to conform to stringent OEM specifications, no matter where they are applied, with application surfaces that include anything from smooth metals through to smooth, rough or difficult low surface energy plastics.

Our pressure sensitive adhesives are suitable for very demanding automotive applications, and address a full range of substrates used in the automotive segment:

- Avery Dennison AL170 adhesive offers excellent resistance to heat, UV light and harsh chemicals. It is mainly used for applications on metal
- For applications on paints and plastics, tackified acrylic adhesive S8015 features a good balance of performance in terms of peel adhesion and resistance properties
- The rubber hybridised acrylic adhesive S8049 is ideal for difficult-to-label substrates, including rough or low surface energy plastics

White Polyester Materials	Code	Surface	Topcoat (TC) / Print Treatment (PT)	Adhesive-Technology (Solv.-/Em.-Acrylic)	Adhesive coatweight (g/m²)	Min. Application temp. (°C)	Min. Service temp. (°C)	Max. Service temp. (°C)	Rough surfaces	Apolar surfaces (low surface tension)	Curved substrates	Slightly dirty or oily surfaces	Dusty / dirty surrounding	UL-approval	Exact	Ready Width	FTO
Transfer PET white TOP / AL170 / BG42wh	AA642	glossy	TC	Solv.	24	0	-80	+150			○		●	Y	●		
Transfer PET matt white / AL170 / BG42wh	AA145	matt	TC	Solv.	24	0	-80	+150			○			Y	●		
Transfer PET 75 matt white / AL170 / BG42wh	AI397	matt	TC	Solv.	24	0	-80	+150			○			Y			●
Transfer PET white TOP / S8015 / BG42wh	AA670	glossy	TC	Solv.	32	+7	-40	+150	●	●			●	Y		●	
Transfer PET matt white / S8015 / BG42wh	AA672	matt	TC	Solv.	32	+7	-40	+150		●				Y		●	
Transfer PET 75 matt white / S8015 / BG42wh	AI399	matt	TC	Solv.	32	+7	-40	+150		●				Y			●
Transfer PET white TOP / S8049 / BG42wh BSS	AJ059	glossy	TC	Solv.	45	+5	-40	+150		●	○	●	●	Y		●	
Transfer PET matt white / S8049 / BG42wh BSS	AL854	matt	TC	Solv.	45	+5	-40	+150	●	●	○	●		Y		●	
Transfer PET 75 matt white / S8049 / BG42wh BSS	AL851	matt	TC	Solv.	45	+5	-40	+150	●	●	○	●		Y			●
Chrome and Silver Polyester Materials																	
Transfer PET matt chrome TOP / AL170 / BG42wh	AA645	semi	TC	Solv.	24	0	-80	+150			○		●	Y		●	
Transfer PET matt silver / AL170 / BG42wh	AA146	matt	TC	Solv.	24	0	-80	+150			○			Y	●		
Transfer PET 75 matt silver / AL170 / BG42wh	AI398	matt	TC	Solv.	24	0	-80	+150						Y			●
Transfer PET matt chrome TOP / S8015 / BG42wh	AA674	semi	TC	Solv.	32	+7	-40	+150	●	●			●	Y		●	
Transfer PET matt silver / S8015 / BG42wh	AA676	matt	TC	Solv.	32	+7	-40	+150	●	●				Y			●
Transfer PET 75 matt silver / S8015 / BG42wh	AI400	matt	TC	Solv.	32	+7	-40	+150	●	●				Y			●
Transfer PET matt chrome TOP/S8049/BG42wh BSS	AL852	semi	TC	Solv.	45	+5	-40	+150	●	●	○	●	●	Y	●		
Transfer PET matt silver / S8049 / BG42wh BSS	AJ060	matt	TC	Solv.	45	+5	-40	+150	●	●	○	●		Y		●	
Transfer PET 75 matt silver / S8049 / BG42wh BSS	AL850	matt	TC	Solv.	45	+5	-40	+150	●	●		●		Y		●	
Other Materials																	
Transfer PET Trans TOP / AL170 / BG42wh	AC393	glossy	TC	Solv.	24	0	-80	+150			○		●	Y		●	
Overlaminating PET 25 / AL170 / HF80	AA647	glossy	PT	Solv.	20	0	-80	+150					●	Y	●		
Transfer PET white CR / S8015 / BG42wh	BB815	matt	TC	Solv.	32	+7	-40	+150	●	●				Y			●
Transfer PET silver CR / S8015 / BG42wh	AZ348	matt	TC	Solv.	32	+7	-40	+150	●	●				Y			●
Transfer PET 36 white TOP / S8092 / PET75	AS191	glossy	TC	Sili-cone	50	+5	-80	+150	●	●	○	●		N			
Transfer PVC 50 cast white / S8065 / BG50wh	AE357	glossy	-	Solv.	40	+5	-40	+120	●	●	●	●	●	Y			●
Transfer PVC 50 cast silver / S8065 / BG50wh	AE416	glossy	-	Solv.	40	+5	-40	+120	●	●	●	●	●	Y			●
Transfer PVC 50 cast clear / S8065 / BG50wh	AI995	glossy	-	Solv.	40	+5	-40	+120	●	●	●	●	●	**			●

Please see the individual product data sheets for additional compliance details, e.g. cUL

* Contact your sales representative for details
** Only for cable

Y Yes
N No

○ recommended
● highly recommended
● preferred choice

Ex EXACT
RW Ready Width
FTO MOQ 300 sqm

LABEL MATERIALS FOR ELECTRONICS AND APPLIANCE APPLICATIONS

Avery Dennison allows you to choose a material that matches product performance with your specific application needs. A full range of UL recognised self-adhesive label materials is available for the electronics and home appliance segment.

Our topcoated, white, matt chrome, silver and transparent polyester label materials are combined with the following adhesives:

- S8020: emulsion acrylic adhesive for smooth metals and some plastics
- S8001: our most versatile emulsion acrylic adhesive for smooth and slightly rough substrates, including low surface energy plastics and lacquers
- S8030: general purpose solvent based acrylic adhesive

Some applications are not technically challenging, but can be very cost sensitive. In these cases our emulsion acrylic adhesive S8007 is an excellent solution, especially on smooth substrates with high or medium surface energy such as metals or plastics, for example ABS, Polystyrene, Polycarbonate and Nylon.

For the labelling of outgassing substrates, label materials with the adhesive S8040 are recommended. The pattern of micro-channels in this adhesive allows trapped air to escape, resulting in labels that stay smooth.

Glossy White Polyester Materials	Code	Color	Topcoat (TC) / Print Treatment (PT)	Adhesive-Technology (Solv.-/Em.-Acrylic)	Adhesive coatweight (g/m²)	Min. Application temp. (°C)	Min. Service temp. (°C)	Max. Service temp. (°C)	Rough surfaces	Apolar surfaces (low surface tension)	Curved substrates	Slightly dirty or oily surfaces	Dusty / dirty surrounding	UL-approval	Exact	Ready Width	FTO
Transfer PET white PT16 / S8007 / BG40wh	BD843	glossy	PT	Em.	19	+5	-40	+120						Y		●	
Transfer PET white PT / S8020 / BG42wh	AA639	glossy	PT	Em.	20	+5	-40	+150		O			●	Y	●		
Transfer PET white TOP / S8020 / BG42wh	AA641	glossy	TC	Em.	20	+5	-40	+150		O			●	Y	●		
Transfer PET white PT / S8001 / BG42wh	AF029	glossy	PT	Em.	27	+5	-40	+150		●	O		●	Y		●	
Transfer PET white TOP / S8001 / BG42wh	AF031	glossy	TC	Em.	27	+5	-40	+150		●	O		●	Y	●		
Transfer PET white PT / S8030 / BG42wh	AD225	glossy	PT	Solv.	24	+5	-40	+150		●			●	Y			●
Transfer PET white TOP / S8030 / BG42wh	AD222	glossy	TC	Solv.	24	+5	-40	+150		●			●	Y	●		
Transfer PET wh TCB / S8040 / BG65EM	BD188	glossy	TC	Solv.	25	+5	-40	+150						N			●
Matt White Polyester Materials																	
Transfer PET matt white / S8020 / BG42wh	AA643	matt	TC	Em.	20	+5	-40	+150		O				Y	●		
Transfer PET matt white TC6 / S8001 / BG42wh	AF030	matt	TC	Em.	27	+5	-40	+150		●	O			Y	●		
Transfer PET matt white TC6 / S8030 / BG42wh	AN754	matt	TC	Solv.	24	+5	-40	+150		●				Y		●	
Transfer PET matt white / S8030 / BG42wh	AD223	matt	TC	Solv.	24	+5	-40	+150		●				Y		●	
Transfer PET matt wh TCA / S8040 / BG65EM	BD187	matt	TC	Solv.	25	+5	-40	+150						N			●
Chrome and Silver Polyester Materials																	
Transfer PET bright chrome TOP / S8030 / BG42wh	AE366	glossy	TC	Solv.	24	+5	-40	+150		●			●	Y			●
Transfer PET bright chrome TOP / S8001 / BG42wh	AM491	glossy	TC	Solv.	24	+5	-40	+150		●	O		●	N		CTO	
Transfer PET matt chrome PT12 / S8007 / BG40wh	AP062	semi	PT	Em.	19	+5	-40	+120						Y		●	
Transfer PET matt chrome TOP / S8020 / BG42wh	AA644	semi	TC	Em.	20	+5	-40	+150		O			●	Y	●		
Transfer PET matt silver / S8020 / BG42wh	AA646	matt	TC	Em.	20	+5	-40	+150		O				Y	●		
Transfer PET matt chrome TOP / S8001 / BG42wh	AF032	semi	TC	Em.	27	+5	-40	+150		●	O		●	Y	●		
Transfer PET matt chrome TOP / S8030 / BG42wh	AD221	semi	TC	Solv.	24	+5	-40	+150		●			●	Y		●	
Transfer PET matt silver / S8030 / BG42wh	AD224	matt	TC	Solv.	24	+5	-40	+150		●				Y	●		
Transfer PET matt chrome TOP / S8040 / BG65EM	BD186	semi	TC	Solv.	25	+5	-40	+150						N			●
Transparent Polyester Materials																	
Transfer PET Trans TOP / S8020 / BG42wh	AC397	glossy	TC	Em.	20	+5	-40	+150		O			●	Y	●		
Transfer PET Trans TOP / S8001 / BG42wh	BE014	glossy	TC	Em.	27	+5	-40	+150		●	O		●	Y		CTO	
Transfer PET Trans TOP / S8030 / BG42wh	AD220	glossy	TC	Solv.	24	+5	-40	+150		●			●	Y		●	

Please see the individual product data sheets for additional compliance details, e.g. cUL

* Contact your sales representative for details
** Only for cable

Y Yes
N No

O recommended
● highly recommended
● preferred choice

Ex EXACT
RW Ready Width
FTO MOQ 300 sqm

Overlamination Films	Code	Color	Topcoat (TC) / Print Treatment (PT)	Adhesive-Technology (Solv.-/Em.-Acrylic)	Adhesive coatweight (g/m²)	Min. Application temp. (°C)	Min. Service temp. (°C)	Max. Service temp. (°C)	Rough surfaces	Apolar surfaces (low surface tension)	Curved substrates	Slightly dirty or oily surfaces	Dusty / dirty surrounding	UL-approval	Exact	Ready Width	FTO
Overlaminating PET 25 / S8020 / BG42wh	AE407	glossy	PT	Em.	20	+5	-40	+150					●	Y		●	
Overlam PET 23 UV / S8020 / PET23	AS675	glossy	PT	Em.	20	+5	-40	+150		O			●	Y	●		
Overlam PET 25 Matt / AL170 / HF80	AC747	matt	-	Solv.	20	0	-80	+150					●	Y		●	
Overlam Polycarb 50 Matt / S8020 / PET36	AB702	semi	-	Em.	20	+5	-40	+125		O			●	Y			●
Polyimide Films																	
Polyimide I GL White TC13 / S8088 / BG50wh	BC668	glossy	TC	Solv.	27	+10	-40	+260						Y		●	
Polyimide I white TC14 / S8088 / BG50wh	BB810	semi	TC	Solv.	27	+10	-40	+260						Y		●	
Polyimide II white TC14 / S8088 / BG50wh	BC133	semi	TC	Solv.	27	+10	-40	+260						Y		●	
Polyimide I matt white / S8088 / 50#SCK	AI300	matt	TC	Solv.	27	+10	-40	+280						Y		●	
Polyimide II matt white / S8088 / 50#SCK	AH415	matt	TC	Solv.	27	+10	-40	+280						Y		●	
Other Products																	
Transfer PP TR 75 matt white / S8020 / BG42wh	AC463	matt	TC	Em.	20	+5	-40	+100		O	O			Y	●		
Transfer PP TR 75 matt white / S8001 / BG42wh	AJ095	matt	TC	Em.	27	+5	-40	+100		●	O			Y	●		
Transfer PET white CR / S8015 / BG42wh	BB815	matt	TC	Solv.	32	+7	-40	+150		●				Y			●
Transfer PET silver CR / S8015 / BG42wh	AZ348	matt	TC	Solv.	32	+7	-40	+150		●				Y			●
PET void check matt chrome / S8015 / BG42wh	AB048	semi	TC	Solv.	26	+7	-40	+120		●			●	Y		●	
ESD PET white TOP / S8087 / BG55wh	AU978	glossy	TC	Solv.	24	+4	-40	+150						Y			●

LABEL MATERIALS FOR CABLE LABELLING

The Avery Dennison portfolio for cable labelling includes UL-recognised label materials suitable for the US market, as well as materials with flame retardant properties (according to FMVSS 302) and good resistance to UV light. Choices include white, highly flexible materials for flag labels – with space for printed text or barcodes – and materials for wrap-around labels.

Products for **cable labeling**	Code	Color	Topcoat (TC) / Print Treatment (PT)	Adhesive-Technology (Solv.-/Em.-Acrylic)	Adhesive coatweight (g/m²)	Min. Application temp. (°C)	Min. Service temp. (°C)	Max. Service temp. (°C)	Rough surfaces	Apolar surfaces (low surface tension)	Curved substrates	Slightly dirty or oily surfaces	Dusty / dirty surrounding	UL-approval	Exact	Ready Width	FTO
Transfer PO white / S8020 / BG42wh	BF481	white	-	Em.	20	+5	-40	+80		O	●			Y			●
Transfer PO clear / S8020 / BG42wh	BF483	trans	-	Em.	20	+5	-40	+80		O	●			Y			●
Transfer PP TR 75 matt white / S8001 / BG42wh	AJ095	white	TC	Em.	27	+5	-40	+100	O	●	O			Y	●		
Overlam PET 25 matt trans / AL170 / HF80	BF482	trans	-	Solv.	20	0	-80	+150			●		●	N		CTO	
PVC outdoor white / AL170 / BG42wh	AA648	white	-	Solv.	24	0	-40	+110			●		●	Y	●		
PVC outdoor matt white / AL170 / BG42wh	AA948	white	-	Solv.	24	0	-40	+110			●		●	Y	●		
PVC outdoor clear / AL170 / BG42wh	AS880	trans	-	Solv.	24	0	-40	+110			●		●	Y		●	
PVC outdoor matt clear / AL170 / BG42wh	AW627	trans	-	Solv.	24	0	-40	+110			●		●	Y		●	
Transfer PVC 50 cast white / S8065 / BG50wh	AE357	white	-	Solv.	40	+5	-40	+120	●	●	●	●	●	Y			●
Transfer PVC 50 cast clear / S8065 / BG50wh	AI995	trans	-	Solv.	40	+5	-40	+120	●	●	●	●	●	**			●

Please see the individual product data sheets for additional compliance details, e.g. cUL

* Contact your sales representative for details
** Only for cable

Y Yes
N No

O recommended
● highly recommended
● preferred choice

Ex EXACT
RW Ready Width
FTO MOQ 300 sqm

UL RECOGNITION

UL 969 ('Marking and Labelling Systems') is the most commonly used UL standard for labels, but it applies only to labels on smooth and flat surfaces. Cable and wire labelling is evaluated against different UL standards, and Avery Dennison offers materials that comply with the following standards:

> UL 817: cord sets and power supply cords
> UL 2238: cable assemblies and fittings for industrial control and signal distribution

LABEL MATERIALS FOR OUTDOOR APPLICATIONS

Avery Dennison's range of UL-recognised label materials for outdoor use feature polymeric plasticized PVC films:

> PVC Outdoor: calendered films available in white, transparent, silver and yellow
> PVC Cast: high performance cast films available in white transparent and silver
> Overlam PET 23 UV:
  » UV filtering, crystal clear, gloss overlaminating polyester film, available with two adhesives.
  » Prolongs the lifetime of printed labels, especially when inks with low UV resistance are used.

Products for **outdoor applications**	Code	Color	Topcoat (TC) / Print Treatment (PT)	Adhesive-Technology (Solv.-/Em.-Acrylic)	Adhesive coatweight (g/m²)	Min. Application temp. (°C)	Min. Service temp. (°C)	Max. Service temp. (°C)	Rough surfaces	Apolar surfaces (low surface tension)	Curved substrates	Slightly dirty or oily surfaces	Dusty / dirty surrounding	UL-approval	Exact	Ready Width	FTO
PVC outdoor white / AL170 / BG42wh	AA648	white	-	Solv.	24	0	-40	+110			●		●	Y	●		
PVC outdoor matt white / AL170 / BG42wh	AA948	white	-	Solv.	24	0	-40	+110			●		●	Y	●		
PVC outdoor clear / AL170 / BG42wh	AS880	trans	-	Solv.	24	0	-40	+110			●		●	Y		●	
PVC outdoor matt clear / AL170 / BG42wh	AW627	trans	-	Solv.	24	0	-40	+110			●		●	Y		●	
Transfer PVC 50 cast white / S8065 / BG50wh	AE357	white	-	Solv.	40	+5	-40	+120	●	●	●	●	●	**			●
Transfer PVC 50 cast silver / S8065 / BG50wh	AE416	silver	-	Solv.	40	+5	-40	+120	●	●	●	●	●	Y			●
Transfer PVC 50 cast clear / S8065 / BG50wh	AI995	trans	-	Solv.	40	+5	-40	+120	●	●	●	●	●	Y			●
Transfer PVC 50 cast yellow / S8065 / BG50wh	AE359	yellow	-	Solv.	40	+5	-40	+120	●	●	●	●	●	Y			●
Overlam PET 23 UV / S8020 / PET23	AS675	trans	PT	Em.	20	+5	-40	+150					●	Y	●		
Overlam PET 23 UV / AL170 / PET23	AS674	trans	PT	Solv.	20	0	-40	+150					●	Y			●

LABEL MATERIALS WITH SECURITY FEATURES

For Durable Goods labelling applications, where security features are required, Avery Dennison offers a full range of products, consisting primarily of void polyesters and ultra-destructible vinyls.

Products with **security features**	Code	Color	Topcoat (TC) / Print Treatment (PT)	Adhesive-Technology (Solv.-/Em.-Acrylic)	Adhesive coatweight (g/m²)	Min. Application temp. (°C)	Min. Service temp. (°C)	Max. Service temp. (°C)	Rough surfaces	Apolar surfaces (low surface tension)	Curved substrates	Slightly dirty or oily surfaces	Dusty / dirty surrounding	UL-approval	Exact	Ready Width	FTO
PET void check matt chrome / S8015 / BG42wh	AB048	silver	TC	Solv.	26	+7	-40	+120		●			●	Y		●	
PVC semi gloss white UD / S2000N / BG50wh	AZ426		-	Em.	22	0	-20	+80						Y	CTO		
PVC semi gloss white UD / S690 / BG50wh	AW451		-	Solv.	32	+10	-40	+110	●					Y	CTO		

Additional products and Mix & Match™ constructions are available upon request.

Please see the individual product data sheets for additional compliance details, e.g. cUL

* Contact your sales representative for details
** Only for cable

Y Yes
N No

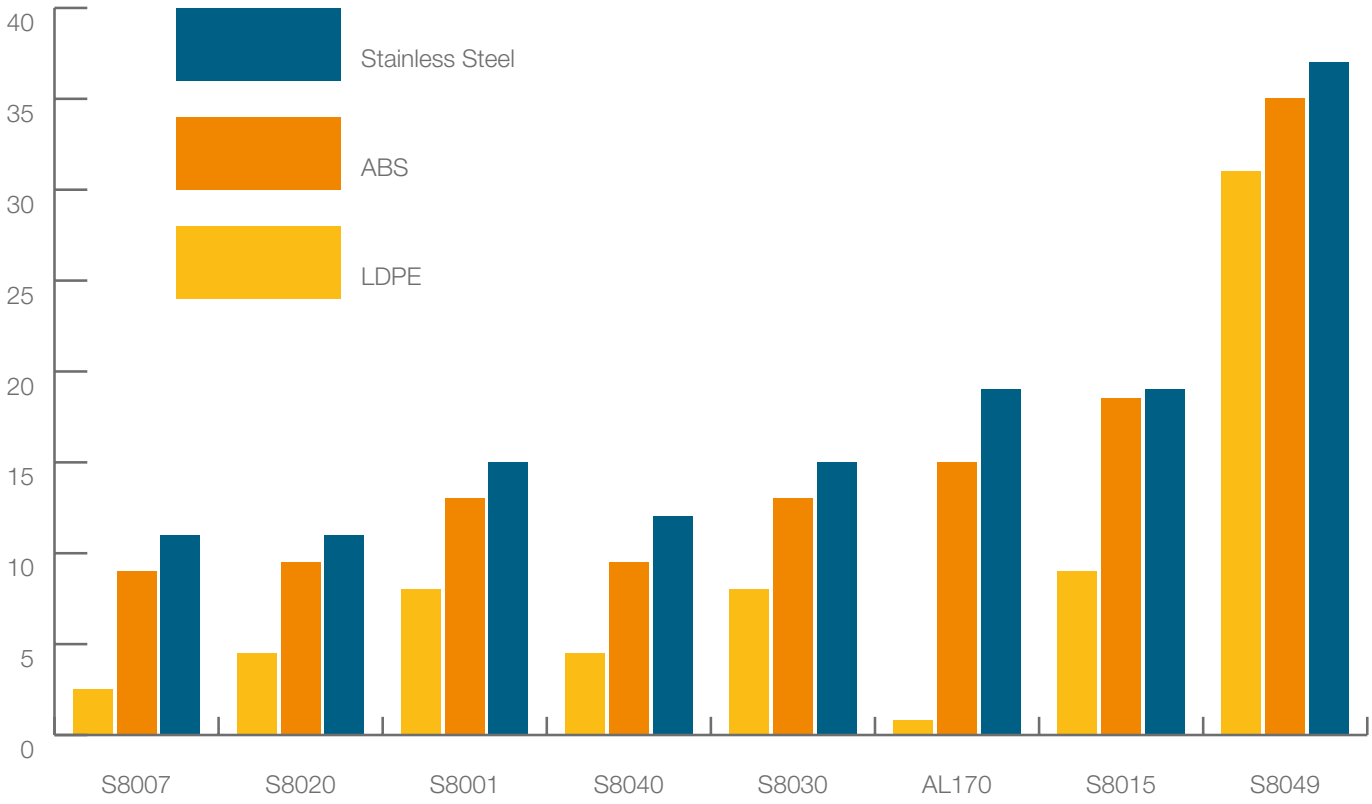
○ recommended
● highly recommended
● preferred choice

Ex EXACT
RW Ready Width
FTO MOQ 300 sqm

ADHESIVES USED IN DURABLE GOODS LABELLING APPLICATIONS

Avery Dennison polyester films are available with a range of adhesives for different applications. Emulsion acrylic adhesives S8007, S8020 and S8001 are used in applications where price is a key differentiator. Solvent acrylic adhesives S8040, S8030, AL170, S8015 and S8049 are recommended if high humidity and chemical resistance are required.

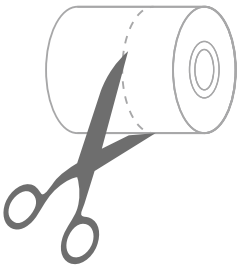
The following table shows peel adhesion levels offered by our Core Range adhesives, according to FTM1 on selected surfaces:



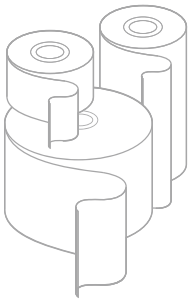
For further product details please refer to the durable goods application chart, available from your sales representative.

Fasson EXACT™

The EXACT service allows you to order the exact roll width at a predefined length.



Fasson Ready Width™



The Ready Width service allows you to purchase low volume products at standard widths and lengths. This service now includes products with a length of only 500 linear meter.

DISCLAIMER - All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison's products are sold subject to Avery Dennison's general terms and conditions of sale, see http://terms.europe.averydennison.com

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