

Facestock

A crystal clear, gloss overlaminating polyester film with print treated surface for enhanced ink adhesion.

Basis Weight	32 g/m ²	ISO 536
Caliper	23 µm	ISO 534

Adhesive

AL170 is a high cohesive, permanent, solvent-based acrylate adhesive.

Liner

Hygroflat 80, a one side coated, bleached kraft paper.

Basis Weight	80 g/m ²	ISO 536
Caliper	81 µm	ISO 534

Laminate

Total Caliper	131 µm±10%	ISO 534
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Performance Data

Initial Tack	10 N/25mm	FTM 9 Glass
Peel Adhesion 90°	9 N/25mm	FTM2 st.st. 24 hrs

Min. Application Temp.	0 °C
Service Temperature	-80 °C to 150 °C

Adhesive Coat Weight	24 g/m ²	FTM12
Adhesive Type	Solvent Acrylic	

Adhesive Performance

AL170 is distinguished by very high ageing stability and features excellent resistance against chemicals, heat and UV light. It has a high peel adhesion on high and medium surface energy substrates.

Applications and Use

This product is designed for overlamination of polyester and vinyl label materials in order to protect the print from abrasion or chemical exposure. It can also improve the durability of other filmic and paper label materials. This glass clear product is ideal to change the label appearance to a high gloss finish or to make a label material or printed areas thermal transfer printable.

The hygroflat backing paper is generally suited to the refolding demands of high-speed computer printers, providing optimum layflatness and excellent interfolding characteristics. A decurling bar might be needed for optimal results.

Conversion and Printing

Overlaminating PET 25 can be printed with conventional printing techniques. Variable information can be applied using thermal transfer. For best scratch resistance resin ribbons are recommended. Overlamination can be an aid to matrix stripping and automatic label dispensing of the base label material. However, due to the low calliper of this film, we do not recommend automatic dispensing by itself.

Compliance and Approvals

Sustainable alternative: This material is available with 70% recycled content in the face material under a *different product code*.

AA647

Fasson ®

OVERLAMINATING PET25 AL170-HF80 FSC



OVERLAMINATING PET25

AL170

HF80 FSC

This is an automatically generated datasheet. All data to be considered as typical values and subject to change without prior notice. Further testing is always recommended.
If you would like to make a suggestion or comment on this datasheet, please send an email to datasheet.mgmt@eu.averydennison.com

This product is UL and C-UL recognized (UL 969, CSA C22.2 No. 0.15). The UL file number is MH27538. This material complies with BS 5609:1986, Section two, Marine Immersion Test. To comply with BS 5609:1986 Section 3, the specific inks or ribbons have to be evaluated; tests can be performed upon request.

Shelf Life

To obtain optimal performance, use this product within two years of the date of manufacture, under storage conditions as defined by FINAT (20-25°C; 40-50%RH). Prolonged storage outside these conditions might reduce the shelf life.

Appendix

UL and CSA recognition

This product meets the requirements as stated in UL 969 and CSA C22.2 No. 0.15 for indoor use. The UL file number is MH27538. For specific information on approved conditions, see appendix.

Performance Data

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

Peel Adhesion:

FTM1: 180°, 300 mm/min, dwell time: 48 hours

Surface	N/25mm
ABS	11,5
Aluminium	11,5
Automotive lacquered panels	11,0
Glass	15,0
HDPE	3,0
LDPE	2,0
PA6	11,5
Stainless Steel	13,0

Chemical Resistance:

The performance results are based on 4 hours immersions at room temperature unless otherwise noted. Samples were applied to the test panel and conditioned for 24 hours before immersion and evaluated immediately upon removal. Peel adhesion was measured according to FTM1.

Chemical	Test Substrate	N/25mm	Visual appearance	Edge Penetration
Brake Fluid	Glass	14,0	No change	0 mm
Diesel	Glass	12,7	No change	0 mm
Engine Oil	Glass	13,9	No change	0 mm
Gasoline	Glass	10,2	No change	4 mm
Heptane	Glass	11,5	No change	3 mm
Water, distilled	Aluminium	11,0	No change	0 mm

Chemicals:

Brake Fluid: DOT 4 Synthetic (One Way), Diesel: TOTAL, Engine Oil: TOTAL quartz 700, 10 W 40,
Gasoline: TOTAL Euro 95

Appendix

Thermal Transfer Printing:

Printability – Physical Resistance

Flat head printers (tests were performed with the printer Zebra XII 140):

Ribbon	Settings speed energy		Print Quality	ANSI Grade	Scratch resistance	Tape resistance
Armor AXR7+	3	25	++	*	++	+
Armor AXR8	3	30	++	*	++	+
Dai Nippon R510	3	30	+	*	++	o
limak SP330	3	25	++	*	++	+
ITW B324	3	25	+	*	++	+
Ricoh B110Cx	3	30	+	*	++	+

Near edge printers (tests were performed with the printer Avery TTX 450 – Near Edge):

Ribbon	Settings	Print Quality	ANSI Grade	Scratch resistance	Tape resistance
Armor AXR 600	5 "/s	++	*	+	o
Ricoh B120 Ec	5 "/s	+	*	-	+

ANSI (American National Standards Institute) Grade: information about barcode quality

A: excellent B: good C: acceptable D: readable with difficulty

++: excellent +: good o: acceptable -: poor

*: Based on a white substrate. Readability may vary when applied onto different coloured substrates.

Chemical Resistance

The printed samples were wetted on the surface with a soft clean cotton cloth soaked in the test solution by wiping 10 times back and forth with light pressure. After 5 seconds they were dried with a clean dry soft cloth. After 15 minutes the evaluation took place.

	AXR7+	AXR8	R510	SP330	B324	B110Cx	AXR 600	B120 Ec
Anti-Freeze	+	+	+	+	+	+	+	+
Biodiesel	+	+	+	+	+	+	+	+
Brake fluid	-	+	+	-	o	o	+	o
Cleaner solvent	+	+	+	o	+	+	+	+
Engine oil	+	+	+	+	+	+	+	+
Gasoline	-	-	+	-	+	-	+	-
Hard wax polish	+	+	+	+	+	+	+	+
Isopropanol	-	+	+	+	+	o	+	+
Spirit	o	+	+	o	-	-	+	o

+: good (no change) o: acceptable (minor change, still readable) -: poor

Chemicals:

Anti-Freeze: Speedfrost "Speedfroil" 1:1 in water, Brake Fluid: DOT 4 Synthetic (One Way),

Cleaner Solvent: "Caramba" Cold Cleaner, Engine Oil: TOTAL quartz 700, 10 W 40

Gasoline: TOTAL Euro 95, Hard Wax Polish: „Nigrin" Hard Wax Polish

Appendix

Compliance Data

UL – Underwriters Laboratories (UL969)

This material is UL recognized as pressure-sensitive overlamination for producing finished printed labels. The conditions of acceptance are:

- Affixed to polyester label material, maximum temperature 125°C, minimum temperature -40°C. Suitable where exposed indoors to high humidity or occasional exposure to water.
- Affixed to vinyl label material, maximum temperature 60°C, minimum temperature -40°C. Suitable where exposed indoors to high humidity or occasional exposure to water.

Details are listed in the UL file MH27538.

The UL certification includes the printing with one or more of the following thermal transfer ribbons: Armor "AXR600", "AXR7+", Dainippon "R510", "TR6075", limak "SP-330", Ricoh "B110C", "B110CX", "B120 EC", Sony "TR5070".

CSA – Canadian Standards Association

UL has tested this product according to the requirements described in CSA C22.2 No. 0.15. This product is C-UL recognized as pressure-sensitive overlamination for producing finished printed labels. The conditions of acceptance are:

- Affixed to polyester label material, maximum temperature 125°C, minimum temperature -40°C. Suitable where exposed indoors to high humidity or occasional exposure to water.
- Affixed to vinyl label material, maximum temperature 60°C, minimum temperature -40°C. Suitable where exposed indoors to high humidity or occasional exposure to water.

Details are listed in the UL file number MH27538.

The C-UL certification includes the printing with Dainippon "TR6075", limak "SP-330" and Ricoh "B120 EC".

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Warranty

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