

Facestock

A white glossy polymeric plasticised vinyl film.

Caliper: 80 µm ISO 534

Basis weight: 115 g/m² ISO 536

Adhesive

AL170 is a high cohesive, permanent, solvent based acrylic adhesive.

Liner

siliconized glassine paper, wood-free, super calandered and extremely tough and tear-resistant despite its thinness. Without back imprint.

Basis weight: 65 g/m² ISO 536

Caliper: 58 µm ISO 534

Laminate

Total caliper: 162 µm

Performance data

Type: Solvent Acrylate

Initial Tack: 8 N/25 mm FTM 9 stainless steel

Peel Adhesion: 13,5 N/25 mm FTM 2 stainless steel 24 hrs.

Min. application temperature: 0 °C

Min. service temperature: -40 °C

Max. service temperature: +110 °C

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

PVC outdoor white – AL170 is ideal for many medium-life indoor and outdoor applications. A durability of 7 years (vertical exposure) can be expected.¹

The material is self-extinguishing.

For special requirements we strongly recommend application tests.

Conversion/printing

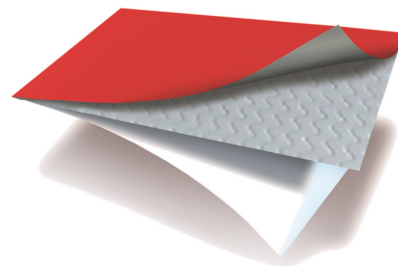
This product is qualified by EFI Jetrion and Durst for UV inkjet printing, however printing of large solid areas is not recommended.

PVC outdoor white features good thermal transfer printability; for good abrasion resistance we recommend the use of resin ribbons.

The material shows good die cutting performance.

AA648

Fasson® PVC outdoor white – AL170 – BG42WH



PVC outdoor white

AL170

BG42Wh

¹ 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 labels 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.

Flammability

This product is self extinguishing to first measuring mark.
Test method: FMVSS 302

UL approval

This product is UL recognized for indoor and outdoor use, the file number is MH27538. For specific information on approved conditions, see appendix 2.

Shelf life

Two years under storage conditions as defined by FINAT.

Appendix 1:**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	19,5
Aluminium	23,0
Automotive lacquered panels	23,0
Glass	26,0
HDPE	6,0
LDPE	3,8
PA6	20,0
Stainless Steel	22,0

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	20	+	A	++	++
Armor AXR8	3	30	++	B	++	++
Dai Nippon R300	3	30	+	B	++	++
Dai Nippon R-510	3	20	+	A	++	++
limak SP330	3	30	++	B	++	++
Ricoh B110Cx	3	10	+	A	++	++

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

Ribbon	Settings	Print Quality	ANSI Grade	Scratch resistance	Tape res- tance
Armor APX650	5 "/s	++	A	++	+
Ricoh B120E	7 "/s	++	A	++	-

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

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	R300	R510	SP 300	B110 CX	APX 650	B120 E
Ad Blue ¹	+	+	+	+	+	+	+	+
Anti-Freeze ²	+	+	+	+	+	+	+	+
Biodiesel	+	+	+	+	+	+	-	-
Bioethanol E85 ³	-	+	+	+	+	0	-	-
Brake fluid ⁴	+	+	-	+	+	+	-	-
Cleaner solvent ⁵	+	+	+	+	+	+	-	-
Engine oil ⁶	+	+	+	+	+	+	-	-
Gasoline ⁷	-	-	-	+	-	-	-	-
Hard wax polish ⁸	+	+	+	+	+	+	-	-
Spirit	+	+	+	+	+	+	-	-

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

¹ Aral

² Speedfrost "Speedfroil" 1:1 in water

³ CropEnergies CropPower85

⁴ "ATE" SL DOT 4

⁵ "Caramba" Cold Cleaner

⁶ BP 15 W-40

⁷ Super unleaded

⁸ „Nigrin“ Hard Wax Polish

Appendix 2: Compliance Data

UL – Underwriters Laboratories

File Number: MH27538, Category: PGJ12

This material is UL recognized according to UL969, for exposure indoors and outdoors to high humidity or occasional exposure to water.

Substrate	Minimum Temperature (°C)	Maximum Temperature (°C)
Acrylic paint	-40	+60
Alkyd paint	-40	+60
Aluminum	-40	+60
Galvanized steel	-40	+60
Polyester paint	-40	+60
Stainless steel	-40	+60
Polypropylene	-40	+60
Polystyrene	-40	+60
ABS	-40	+60

The UL certification includes the printing with one or more of the following thermal transfer ribbons:

Armor	AXR 600, AXR 7+
Cembre	MG-ETR 990718, MG2-EPTR 991611, MG2-ETR 991600, TPPS-060 842212, TPS-060 842112
Dainippon	R510
Fujicopian	TTM-164
Italigrafica	TF335P
Ricoh	B110C, B110CX
Sony Chemicals	TR5070

Application on cables and wires

File Number: MH26355

ANSI/UL 817: Cord Sets and Power-Supply Cords and
ANSI/UL 2238: Cable Assemblies and Fittings for Industrial Control and Signal Distribution

Cord Type	Min. diameter	Indoor Use	Outdoor Use
UL Style 20276 (Round)	6,8 mm	Yes	No
UL Style 2560 (Round)	6,6 mm	Yes	Yes

The UL certification for cables and wires includes the printing with one or more of the following thermal transfer ribbons:

Armor "AXR7+" and DaiNippon "R510", Iimak "SP-300" and Ricoh "B110CR".

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 for indoor and outdoor use, where exposed to wet locations. The details are listed in the UL file number MH27538.

Group	Application Surface	Max. Temperature (°C)
Metals	Bare, plated or enamelled steel; bare, anodized or enamelled aluminium	+60
Plastic Group V	Polyamide, polyimide	+60
Plastic Group VI	ABS, styrene, styrene acrylonitrile	+60
Plastic Group VIII	Glass-filled polyester, glass-filled epoxy	+60
Powder coated metal Group A	Polyester powder coat paint	+60

The C-UL certification includes the printing with the following thermal transfer ribbons:

Armor	AXR 7+
Cembre	MG-ETR 990718, MG2-EPTR 991611, MG2-ETR 991600, TPPS-060 842212, TPS-060 842112
Dainippon	R510
Fujicopian	TTM-164
Ricoh	B110C, B110CX

Avery Dennison Materials Group Europe

Willem Einthovenstraat 11
2342 BH Oegstgeest
The Netherlands
+31 85 000 2000

Warrenty

All statements, technical information and recommendations about AVERY DENNISON products are based upon 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. AVERY DENNISON products are warranted to be free of defects in material or workmanship for a period of one year from the date of shipment. Any product shown to the satisfaction of AVERY DENNISON within the time provided to be so defective shall be replaced without charge of AVERY DENNISON may issue credit in such amount as it seems reasonable however, in no event shall AVERY DENNISON be responsible for claims beyond the replacement value of the defective product or in any way

liable or responsible for consequential or incidental damages. NO EXPRESS WARRANTIES, WHETHER OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR USE, OR OTHERWISE, EXCEPT AS SET FORTH ABOVE (WHICH IS MADE EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES) SHALL APPLY TO PRODUCTS SOLD BY AVERY DENNISON. AVERY DENNISON SPECIFICALLY DISCLAIMS AND EXCLUDES ALL OTHER SUCH WARRANTIES. NO WAIVER, ALTERNATION, ADDITION OR MODIFICATION OF THE FOREGOING CONDITIONS SHALL BE VALID UNLESS MADE IN WRITING AND SIGNED BY AN EXECUTIVE OFFICER OF AVERY DENNISON. No salesman, representative, or agent of AVERY DENNISON is authorized to give any guarantee, warranty or make any representation contrary to the above.