AA648

Fasson ®

PVC OUTDOOR WHITE
AL170-BG42WH

Facestock

A white glossy polymeric plasticised vinyl film.

Basis Weight	113 g/m²	ISO 536
Caliper	80 µm	ISO 534

Adhesive

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

Liner

BG42 white, a supercalendered glassine paper.

Basis Weight	65 g/m²	ISO 536
Caliper	58 µm	ISO 534
Transparency	50 %	DIN 53147

Laminate

Total Caliper	162 µm±10%	ISO 534

Performance Data

Initial Tack	9 N/25mm	FTM 9 Glass
Peel Adhesion 90°	12.5 N/25mm	FTM2 st.st.
Min. Application Temp.	0 °C	
Service Temperature	-80 °C to 110 °C	
Adhesive Coat Weight	24 g/m²	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

PVC outdoor white is ideal for many medium-life indoor and outdoor applications. A durability of seven years (vertical exposure, middle European exposure conditions) can be expected. The material is self-extinguishing. Due to the high flexibility of the film, the film is used in cable marking applications.

Conversion and Printing

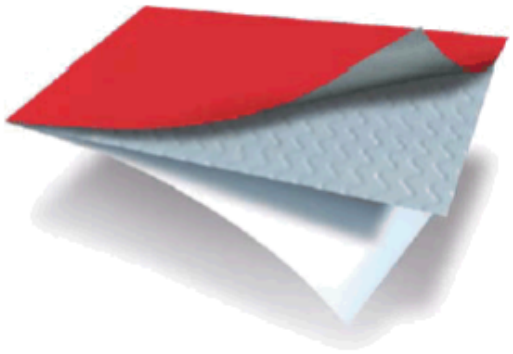
PVC outdoor white features good thermal transfer printability; for good abrasion resistance we recommend the use of resin ribbons. This product is qualified by EFI Jetrion and Durst for UV inkjet printing, however printing of large solid areas is not recommended. The material shows good die cutting performance.

Compliance and Approvals

The adhesive meets the requirements of the so-called “Toy Standard” EN 71-3.

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.



PVC OUTDOOR WHITE	
AL170	
BG42WH	

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

Appendix

UL and CSA recognition

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

Flammability

This material is self-extinguishing to the first measuring mark, according to FMVSS 302.

Test results according to FMVSS 302

Burning data :

	Specimen				
longitudinal	**#1**	**#2**	**#3**	**#4**	**#5**
Single Values Burning Distance (mm)	0	0	0	0	0
Single Values Burning Time (s)	0	0	0	0	0
Single Values Burning Rate (mm/min)	-	-	-	-	-
Mean Value Burning Rate (mm/min)	0				

	Specimen				
lateral	**#1**	**#2**	**#3**	**#4**	**#5**
Single Values Burning Distance (mm)	0	0	0	0	0
Single Values Burning Time (s)	0	0	0	0	0
Single Values Burning Rate (mm/min)	-	-	-	-	-
Mean Value Burning Rate (mm/min)	0				

Compliance with BS 5609

This material complies with BS 5609, Section two, Marine Immersion Test.

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
Aluminum	23,0
Automotive lacquered panels	23,0
Glass	26,0
HDPE	6,0
LDPE	3,8
PA6	20,0
Stainless Steel	22,0

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	20	+	A	++	++
Armor AXR8	3	30	++	B	++	++
Dai Nippon R300	3	30	+	B	++	++
Dai Nippon R510	3	20	+	A	++	++
Iimak 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 resistance
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	SP330	B110Cx	APX650	B120 E
Ad Blue	+	+	+	+	+	+	+	+
Anti-Freeze	+	+	+	+	+	+	+	+
Biodiesel	+	+	+	+	+	+	-	-
Bioethanol E85	-	+	+	+	+	o	-	-
Brake fluid	+	+	-	+	+	+	-	-
Cleaner solvent	+	+	+	+	+	+	-	-
Engine oil	+	+	+	+	+	+	-	-
Gasoline	-	-	-	+	-	-	-	-
Hard wax polish	+	+	+	+	+	+	-	-
Isopropanol	+	+	+	+	+	+	-	-

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

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Chemicals:
Ad Blue: Aral, Anti-Freeze: Speedfrost "Speedfroil" 1:1 in water, Bioethanol E85: CropEnergies CropPower85
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 (UL 969, Category PGJI2)

File Number: MH27538, Category PGJI2

This material is UL recognized for indoor and outdoor use where exposed to high humidity or occasional exposure to water.

Application Surface	Max Temp (°C)	Min Temp (°C)
Aluminum	+100	-40
Acrylic paint	+60	-40
ABS	+60	-40
Alkyd paint	+60	-40
Aluminum	+60	-40
Galvanized steel	+60	-40
Polyester paint	+60	-40
Stainless steel	+60	-40
Polypropylene	+60	-40
Polystyrene	+60	-40

The UL certification includes the printing with 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
Italgrafica	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 includes the printing with one or more of the following thermal transfer ribbons:
Armor "AXR7+" and DaiNippon "R510", Iimak “SP-300” and Ricoh “B110CR”.

Appendix

Compliance Data

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.
The details are listed in the UL file number MH27538, Category PGJI8.

Group	Application Surface	Max. Temperature (°C)
Metals	Bare, plated or enamelled steel; bare, anodized or enamelled aluminium	+100
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

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Warranty