

Facestock

A gloss white polyester film. The smooth surface is covered with a topcoat for very good ink anchorage.

Basis Weight	76 g/m ²	ISO 536
Caliper	50 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/m ²	ISO 536
Caliper	58 µm	ISO 534
Transparency	50 %	DIN 53147

Laminate

Total Caliper	132 µm±10%	ISO 534
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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 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

Transfer PET white TOP is designed for conversion into identification, warning and tracking labels for durable goods such as automotive parts, electronic devices and home appliances. This product is distinguished by the high chemical resistance of the thermal transfer print. For special requirements we strongly recommend application tests.

Conversion and Printing

Very good results can be achieved with thermal transfer printers equipped with conventional or near-edge print heads using resin ribbons. Transfer PET white TOP can also be printed by all conventional roll label techniques, including flexo, UV letterpress, silkscreen. This material is qualified for UV inkjet printing by the following printer manufacturers: EFI Jetrion, Domino (n610i), Durst (TAU 330 RSC) and Xeikon (PX3000). Results of durability tests are available on request. For easy diecutting sharp corners should be avoided.

Compliance and Approvals

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

AA642

Fasson®

TRANSFER PET WHITE TOP AL170-BG42WH



TRANSFER PET WHITE TOP

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

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 and outdoor 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	15,0
Aluminum	14,0
Automotive lacquered panels	15,5
Glass	16,5
HDPE	3,5
LDPE	0,8
PA6	15,5
Stainless Steel	19,0

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
Ad Blue	Aluminium	14,0	No change	0 mm
Biodiesel	Glass	20,0	No change	0 mm
Bioethanol E85	Glass	17,0	No change	2 mm
Brake Fluid	Glass	16,0	No change	0 mm
Diesel	Glass	19,0	No change	0 mm
Engine Oil	Glass	20,5	No change	0 mm
Gasoline	Glass	14,0	No change	6 mm
Heptane	Glass	16,0	No change	4 mm
Water, distilled	Aluminium	14,0	No change	0 mm

Chemicals: Ad Blue: Aral, Bioethanol E85: CropEnergies CropPower85, 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	20	++	A	++	++
Armor AXR8	3	15	++	A	++	++
DNP R300	3	15	++	A	++	++
DNP R510	3	20	++	A	++	++
limak SP330	3	15	++	A	++	++
ITW B324	3	15	++	A	++	++
Ricoh B110CR	3	15	++	A	++	++
Zebra 4800	3	20	++	A	++	++
Zebra 5095	3	15	++	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 AXR 600	4 "/s	+	A	++	o
Armor AXR 800	4 "/s	+	B	++	o
Ricoh B120 E	4 "/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	B324	B110 CR	Z-4800	Z-5095	AXR 600	AXR 800	B120 E
Ad Blue	+	+	+	+	+	+	+	+	+	+	+	+
Anti-Freeze	+	+	+	+	+	+	+	+	+	+	+	+
Biodiesel	+	o	+	+	+	+	+	+	+	-	o	-
Bioethanol E85	-	+	+	+	+	+	+	-	+	-	o	-
Brake fluid	-	+	+	+	o	+	+	-	o	-	o	-
Cleaner solvent	+	+	+	+	+	+	+	+	+	-	-	-
Engine oil	+	+	+	+	+	+	+	+	+	+	+	o
Gasoline	-	o	-	+	-	-	-	-	-	-	-	-
Hard wax polish	+	+	+	+	+	+	+	+	+	-	-	-
Isopropanol	+	+	+	+	+	+	+	+	+	-	o	-
Spirit	-	+	+	+	+	+	+	-	+	-	o	-

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

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 PGJ12)

File Number: MH27538, Category PGJ12

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)	I	O
Acrylic paint	150	-40	X	X
Alkyd paint	150	-40	X	X
Aluminum	150	-40	X	X
Chromate treated metal	150	-40	X	X
Galvanized steel	150	-40	X	X
Polyester paint	150	-40	X	X
Stainless steel	150	-40	X	X
Nylon - Polyamide	100	-40	X	-
Polyethylene terephthalate (PET)	100	-40	X	-
Polypropylene (PP)	80	-40	X	X
Polystyrene (PS)	80	-40	X	X
Polyvinyl fluoride (PVF)	80	-23	X	-
Acrylonitrile butadiene styrene (ABS)	60	-40	X	X

I: Indoor use O: outdoor use

The UL certification includes the printing with EFI Jetrion, Jetrion 4000 and the following thermal transfer ribbons:

Armor	AXR 600, AXR 7+, AXR 8
Astro-med	R-5, RAF (Blue), RF, RY
Cembre	MG-ETR 990718, MG2-EPTR 991611, MG2-ETR 991600, TPPS-060 842212, TPS-060 842112
Coding Products	5440 (Red), 5640 (Blue), 5940
Dainippon	R300, R510, R510 (Blue), R510 (Green), R510 (Red), Signature Series (TM) Resin, TR4070, TR6070, TR6075
Dasco	DR 74, DR 84
Datamax	PGR, SDR, SDR Millennium, SDR-4, SDR-5, SDR-6, SDR-7, SDR-A, SDR-D
Fujicopian	TTM-164
ITW	B324, M 95, R90, R91
limak	Primemark, Primemark 255, SH-36, SP-330, SP-410
Intermec Corp.	053258-2, 054048-4, TMX1500, TMX3200
Italgrafica	TF330, TF335P
Japan Pulp and Paper	Resin 1, Resin 2 (Blue), Resin 2 (Green), Resin 2 (Red)
Japan Pulp and Paper GmbH	Sigma P
Kurz	K300, K500, K501
Mid-City Columbia Inc.	CGL 80HE, MCC-23HE
Monarch	9446
NCR	K3, Matrix Resin, PaceSetter, Perma Max, Promark III, Ultra V
Peak	Ultra Extreme, Ultra Premium
RSI ID Technologies	Pressiza H, Pressiza K, Pressiza R, Pressiza S, Pressiza X
Ricoh	120 EC, B110C, B110CR, B110CX
Sato Corp.	Premier 1
Sony Chemicals	4072, 4075, 4080, 4085+, 4571, 5070, TRX-75
Union Chemcar America	US300
United Barcode Ind.	HR06
Zebra Technologies	5095, 5100, 5175, 5463, 5555, Z-1400, Z-3100, Z-4100

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 PGJ18.

Group	Application Surface	Max. Temperature (°C)	I	O
Metals	Bare, plated or enamelled steel; bare, anodized or enamelled aluminium	+150	X	-
Chrome plated metal		+150	X	X
Plastic Group III	Polycarbonate, acetates, acrylics	+80	X	-
Plastic Group V	Polyamide, polyimide	+80	X	-
Plastic Group VI	ABS, styrene, styrene acrylonitrile	+80	X	-

I: Indoor use O: outdoor use

The C-UL certification includes the printing with EFI Jettrion, Jettrion 4000 and the following thermal transfer ribbons:

Armor	AXR 600, AXR 7+, AXR 8
Cembre	MG-ETR 990718, MG2-EPTR 991611, MG2-ETR 991600, TPPS-060 842212, TPS-060 842112
Dainippon	R300, R510, TR6075
Fujicopian	TTM-164
ITW	B324
Italgrafica	TF330, TF335P
Ricoh	B110CR

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Warranty

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