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AI398

Fasson ®

TRANSFER PET75 MATT SILV - AL170-BG42WH

Facestock

A silver polyester film with backside metallisation. The surface is covered with an absorbing, matt topcoat for very good ink anchorage.

Basis Weight	115 g/m²	ISO 536
Caliper	82 µm	ISO 534

Adhesive

AL170 is a strong, permanent, solvent-based acrylate adhesive.

Liner

BG42 white, a supercalendered glassine paper.

Basis Weight	64 g/m²	ISO 536
Caliper	57 µm	ISO 534
Transparency	50 %	DIN 53147

Laminate

Total Caliper	157 µm±10%	ISO 534

Performance data

Initial Tack	10 N/25mm	FTM 9 Glass
Min. Application Temp.	0 °C	
Service temperature	-80°C to 150°C	
Peel Adhesion 90°	9 N/25mm	FTM 2 st.st. 24hr
Adhesive Type	Solvent Acrylic	
Adhesive weight	24 g/m²	FTM12

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 75 Matt Silver was specially developed for labels on Durables Goods, especially in the automotive industry. but also in other segments. Identification labels and logistical labels are the main applications. When printed with high quality thermal transfer ribbons very high chemical resistance of the print can be achieved.

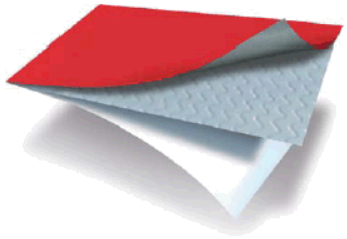
Conversion & printing

Thanks to the special surface coating, very good results can be achieved with thermal transfer printers equipped with conventional or near-edge print heads and using either wax/resin or pure resin ribbons. In addition the product can also be printed by all conventional roll label techniques, such as flexo, UV letterpress, silkscreen. Specific testing is required. For easy diecutting sharp corners should be avoided.

Special Approvals

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

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.



TRANSFER PET75 MATT SILV	
AL170	
BG42WH	

Shelf life

Two years under storage conditions as defined by FINAT (20-25°C; 40-50%RH)

All data to be considered as typical values and subject to change without prior notice. The actual front and liner used might influence adhesive values. 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 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	15,0
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 (mm)
Ad Blue	Aluminium	18,0	No change	0
Biodiesel	Glass	20,0	No change	0
Bioethanol E85	Glass	17,0	No change	2
Brake Fluid	Glass	16,0	No change	0
Diesel	Glass	19,0	No change	0
Engine Oil	Glass	20,5	No change	0
Gasoline	Glass	14,0	No change	6
Heptane	Glass	16,0	No change	4
Water, distilled	Aluminium	19,0	No change	0

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

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+	4	15	+	D[1]	++	++
DNP R300	3	15	++	D[1]	++	+
Iimak SP330	3	15	++	D[1]	++	o
ITW B324	3	15	+	D[1]	++	o
Ricoh B110A	5	15	++	D[1]	++	++
Ricoh B110CX	3	15	+	D[1]	++	++

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 APR 600	6 ”/s	++	D[1]	++	o
DNP TR4500	6 ”/s	++	D[1]	++	o
Ricoh B120 Ex2	6 ”/s	++	D[1]	++	++

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
[1] The print quality is good, but due to the reflection of metallised films the contrast is low

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+	R300	SP330	B324	B110A	B110CX	APR 600	TR 4500	B120E
Ad Blue	+	+	+	+	+	+	+	+	+
Anti-Freeze	+	+	+	+	+	+	o	o	o
Biodiesel	+	+	+	+	o	+	-	-	-
Bioethanol E85	+	+	+	+	o	+	-	-	-
Brake fluid	o	o	+	+	o	o	o	o	o
Cleaner solvent	+	+	+	+	+	+	-	-	-
Engine oil	+	+	+	+	+	+	+	+	+
Gasoline	o	o	o	o	o	o	-	-	-
Hard wax polish	+	+	+	+	+	o	-	-	-
Isopropanol	+	+	+	+	+	+	o	o	o
Spirit	+	+	+	+	+	o	o	o	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 2:
Compliance Data

UL – Underwriters Laboratories (UL969)

File Number: MH27538, Category PGJI2

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

Application Surface	Maximum Temperature (°C)	Minimum Temperature (°C)	I	O
Acrylic paint	150	-40	X	X
Alkyd paint	150	-40	X	X
Aluminum	150	-40	X	X
Galvanized steel	150	-40	X	X
Polyester paint	150	-40	X	X
Stainless steel	150	-40	X	X
Polystyrene (PS)	80	-40	X	X
Acrylonitrile butadiene styrene (ABS)	60	-40	X	X

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

Armor	APR5, APR600, AXR 600, AXR 7+, AXR 8, AXR 800
Astro-med	R-5, RV2
Dainippon	TR4500, TR6075
Graficor	GC12, GC14
ITW	B324
Iimak	SP-330
Kurz	K501
Pelikan	T001, T016, T064
Ricoh	B110A, B110CX, B120 EC, B120 Ex2

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 wet locations.
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	+150
Plastic Group VI	ABS, styrene, styrene acrylonitrile	+80

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

Armor	APR600, AXR 7+, AXR 8
Dainippon	TR4500, TR6075
ITW	B324
Iimak	SP-330
Ricoh	B110A, B110CX, B120 Ex2

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