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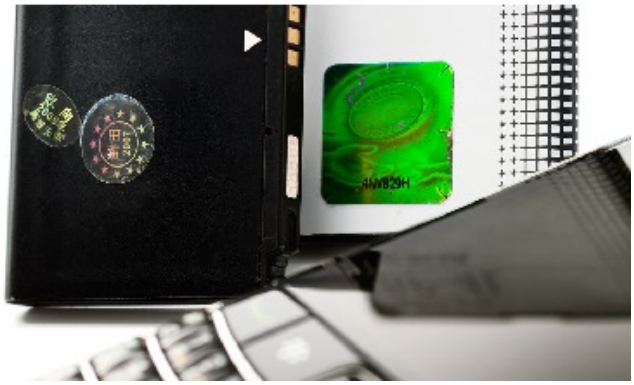
AL852

Fasson ®

TRANSF PET MAT CHR TOP - S8049-BG42WH BSS



A silver polyester material featuring excellent chemical resistance of the thermal transfer print.

Combined with the high coat weight rubber hybridised acrylic adhesive featuring excellent chemical and heat resistance.

Ideal for labelling very rough plastic substrates exposed to harsh chemicals and high temperatures, for example in the automotive industry.

Key features

> Excellent TT printability.
> High chemical resistance of TT print against harsh

> High coat weight, rubber hybridised acrylic adhesive featuring extremely high peel adhesion values on rough - even contaminated - plastic

chemicals.

> Suitable for UV inkjet printing, qualified by EFI Jetrion and Durst.

surfaces; combined with high chemical and temperature resistance.

> 20% higher conversion speed than competitive material without the necessity of cooling the material to avoid adhesive bleed or build-up.

> UL and CSA recognised label material.

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Facestock

A matt finished metallic polyester film. The smooth surface is covered with a topcoat for very good ink anchorage.

Basis Weight	72 g/m²	ISO 536
Caliper	50 µm	ISO 534

Adhesive

S8049 is a rubber hybridised acrylic (RHA) adhesive

Liner

BG42Wh BSS: on both sides siliconized glassine paper, wood-free, super calandered and extremely tough and tear-restistent despite its thinness.

Basis Weight	64 g/m²	ISO 536
Caliper	55 µm	ISO 534
Transparency	45 %	DIN 53147

Laminate

Total Caliper	153 µm±10%	ISO 534

Performance data

Initial Tack	27 N/25mm	FTM 9 glass
Min. Application Temp.	5 °C	
Service temperature	-40°C to 150°C	
Adhesive Type	rubber hybridised acrylic, solvent	
Adhesive weight	45 g/m²	FTM12
Peel Adhesion 90°	27 N/25mm	FTM 2 st.st. 24hr

Adhesive Performance

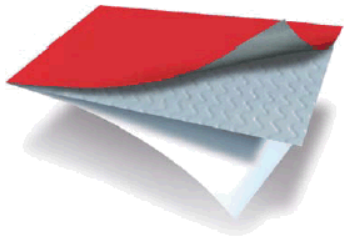
S8049 combines extreme high final adhesion on a wide variety of surfaces including textured and low surface energy substrates with excellent chemical and temperature resistance.
The high adhesive coat weight of 45 g/m² makes this adhesive ideal for labelling rough plastics and other rough surfaces.

Applications and use

Transfer PET matt chrome TOP was specially developed for labels on Durables Goods, including automotive parts, electronic equipment and home appliances.
This is a premium product for the automotive industry using Avery Dennison RHA (rubber hybridised acrylic) adhesive technology. It is designed primarily for creating labels to be applied onto low surface energy plastic automotive parts and lacquers or other rough or low surface energy surfaces. S8049 products are engineered to be resistant to - also harsh - chemicals commonly found in the automotive and electronics industry.

Conversion & printing

Very good results can be achieved with thermal transfer printers equipped with conventional or near-edge print heads using resin ribbons. This product is qualified by EFI Jetrion and Durst for UV inkjet printing. Transfer PET trans TOP can also be printed by all conventional roll label techniques, including flexo, UV letterpress, silkscreen.
For easy diecutting sharp corners should be avoided.
The backside siliconisation of the liner aids the conversion of this



TRANSF PET MT TOP CHR
S8049
BG42WH BSS

material as it reduces the risk of labels transferring to the backside of the label stock after diecutting.

UL and CSA Recognitions

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.

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

Thermal Transfer Printing:

Printability – Physical Resistance

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

Ribbon	Settings speed	Settings energy	Print Quality	ANSI Grade	Scratch resistance	Tape resistance
Armor AXR7+	3	20	++	D[1]	++	++
Armor AXR8	3	15	++	D[1]	++	++
DNP R300	3	15	++	D[1]	++	++
DNP R510	3	20	++	D[1]	++	++
Iimak SP330	3	15	++	D[1]	++	++
ITW B324	3	15	++	D[1]	++	++
Ricoh B110CR	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 AXR 600	4 ”/s	++	D[1]	++	++
Armor AXR 800	4 ”/s	+	D[1]	++	o
Ricoh B120 E	4 ”/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.

	AXR 7+	AXR8	R300	R510	SP330	B324	B110 CR	AXR 600	AXR 800	B120 E
Ad Blue	+	+	+	+	+	+	+	+	+	+

Anti-Freeze	+	+	+	+	+	+	+	+	+	+
Biodiesel	+	o	+	+	+	+	+	-	o	-
Bioethanol E85	-	+	+	+	+	+	+	-	o	-
Brake fluid	-	+	+	+	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 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		Surface	N/25mm
ABS	35,0		PA6	36,0
Aluminum	35,5		Polycarbonate (PC)	37,0
Automotive lacquered panels	35,0		Polyester (PET)	37,5
Glass	37,0		Polypropylene (PP)	34,0
HDPE	32,0		Polystyrene (PS)	31,0
LDPE	31,0		Stainless Steel	37,0

Due to the unique RHA technology we strongly recommend waiting for 24 hours after application before performing any adhesive testing.

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	Stainless Steel	28,0	No change	0
Biodiesel	Stainless Steel	35,0	No change	0
Bioethanol E85	Glass	29,0	No change	2
Brake Fluid	Glass	35,7	No change	0

Diesel	Glass	34,5	No change	0,5
Engine Oil	Glass	36,5	No change	0
Gasoline	Glass	22,7	No change	4,5
Heptane	Glass	23,5	No change	5
Water, distilled	Aluminum	29,5	No change	0
Windshield washer	Stainless Steel	31,5	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

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, wet locations (Type A). 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	+150
Electrostatic Coated Metal A	Polyester powder coat paint	+150
Electrostatic Coated Metal C	Epoxy powder coat paint	+150
Electrostatic Coated Metal D	Polyurethane powder coat paint	+150
Plastic Group II	Polyphenylene oxide, polyphenylene sulphide	+80 (indoor use only)
Plastic Group III	Polycarbonate, acetates, acrylics	+80
Plastic Group IV	Polyethylene, polypropylene, polybutylene	+80
Plastic Group V	Polyamide, polyimide	+80
Plastic Group VI	ABS, styrene, styrene acrylonitrile	+80
Plastic Group VII	PVC (rigid), PVC plasticized	+80
Plastic Group VIII	Glass-filled polyester, glass-filled epoxy	+80

The C-UL certification includes the printing with EFI Jetrion 4000 Series UV and the following thermal transfer ribbons:

Astro-Med "RY", "RAF Blue", Armor "AXR8", "AXR600", "AXR-7+", Coding Products "5640 Blue", "5440 Red", DNP "R-300", "R-510", "R-510 Green", "R-510 Red" (indoor use only), "R-510 Blue", “TR4070”, “TR6070”, “TR6075”, "Signature Series™ Resin", Datamax “SDR-A”, “SDR-D”, “SDR-5”, “SDR-6”, “SDR”, “SDR-7”, “SDR Millenium”, Iimak "SP-575", Intermec "053258 2", "054048-4", ITW "R-90", Japan Pulp and Paper "Resin 1", Kurz "K-500", Mid-City Columbia "CGL-80HE", "MCC-23HE", NCR "Promark 3", "Matrix Resin", Peak "Ultra Premium", "Ultra Extreme", Ricoh "B110C", "B110CR", RSI ID Technologies "Pressiza S", "Pressiza K", "Pressiza X", Sato "Premier 1", Sony "5070", "TRX-75", Union Chemicar "US-300" and Zebra "5100".

Appendix 2:
Compliance Data

UL – Underwriters Laboratories (UL969)
File Number: MH27538

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

Substrate	Minimum Temperature (°C)	Maximum Temperature (°C)	Indoor Use	Outdoor Use
Acrylic powder paint	-40	150	X	X
Aluminum	-40	150	X	X
Epoxy powder paint	-40	150	X	X
Galvanized steel	-40	150	X	X
Polyester powder paint	-40	150	X	X
Polyurethane powder paint	-40	150	X	X
Stainless steel	-40	150	X	X
Acrylonitrile butadiene styrene (ABS)	-40	80	X	X
Polyphenylene oxide/ether (PPOX)	-40	80	X	X
Polystyrene (PS)	-40	80	X	X

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

Astro-Med “RF”, “RY”, “RAF Blue”, “R-5”, Armor “AXR8”, “AXR600”, “AXR-7+”, Coding Products “5940”, “5640 Blue”, “5440 Red”, DNP “R-300”, “R 510”, “R-510 Green”, “R-510 Red” (indoor use only), “R-510 Blue”, “TR4070”, “TR6070”, “TR6075”, “Signature Series™ Resin”, Dasco “DR-74”, “DR-84”, Datamax “SDR-A”, “SDR-D”, “SDR-5”, “SDR-6”, “SDR”, “PGR”, “SDR-7”, “SDR-4”, “SDR Millenium”, Iimak “SH-36”, “SP-330”, “SP-410”, "SP-575", “Primemark”, “Primemark 255”, Intermec “053258-2”, “054048-4”, “TMX 3200”, “TMX 1500”, ITW “B324”, “R-90”, “R-91”, “M-95”, Japan Pulp and Paper “Resin 1”, “Resin 2 Blue”, “Resin 2 Red” (indoor use only), “Resin 2 Green”, Japan Pulp and Paper GmbH “Sigma P”, Kurz “K-300”, “K-500”, “K-501”, Mid-City Columbia “CGL-80HE”, “MCC-23HE”, Monarch “9446”, NCR “Promark 3”, “Pacesetter”, “Ultra V”, “Matrix Resin”, “Perma Max”, “K3”, Peak “Ultra Premium”, “Ultra Extreme”, Ricoh “B110C”, “B110CR”, “120EC”, “B110CX”, RSI ID Technologies “Pressiza H”, “Pressiza R”, “Pressiza S”, “Pressiza K”, “Pressiza X”, Sato “Premier 1”, Sony “4072”, “4080”, “4075”, “4085”, “5070”, “4571”, “TRX-75”, Union Chemicar “US-300”, United Barcode Industries “HR06”, Zebra “5095”, “5175”, “5100”, “5463”, “Z-1400”, “Z-3100”, “Z-4100” and “5555”.

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