

ANS603 / AJ060

Issue date: 01.10.2011

Facestock

A matt silver polyester film with backside metallization. The surface is covered with a matt topcoat designed for computer imprinting.

Basis weight: 80 g/m² ISO 536 Caliper: 0,060 mm ISO 534

Adhesive

S8049 is a rubber hybridised acrylic adhesive with extremely high final adhesion on a wide variety of surfaces including textured and low surface energy substrates. Excellent chemical resistance.

Type: rubber hybridised acrylic, solvent

Coat weight: 45 g/sqm

Initial Tack: 1030 N/m FTM 9 glass Peel Adhesion: 1060 N/m FTM 2 steel 24 hrs. Min. Application temperature: +5 °C Min. service temperature: +5 °C Max. service temperature: +150 °C

Liner

BG42Wh BSS: on both sides siliconized glassine paper, wood-free, super calandered and extremely tough and tear-restistent despite its thinness. Without back imprint.

Basis weight: 64 g/m² ISO 536 Caliper: 0,055 mm ISO 534 Transparency: 45 % DIN 53147 Tensile Strength MD: \geq 5 kN/m ISO 1924

This liner is not recommended for fanfolding.

Total construction caliper

0,160 mm

Typical Values

Typical values, not for specification use: see Appendix 1.

Applications and use

This is a premium product for the automotive industry using patented 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 or other rough or low surface energy surfaces.

The product is briefly repositionable and then the adhesion increases to very high ultimate peelstrength. S8049 products are engineered to be resistent to - also harsh - chemicals commonly found in the automotive and electronics industry.

For special requirements we strongly recommend application tests.

Printing and conversion

In addition to thermal transfer printing (see ribbon recommendation on page 3) the product can also be printed by all conventional roll label techniques, such as flexo, UV letterpress, silkscreen.

Unusually for such a high coatweight adhesive, this product can be converted normally thanks to the unique adhesive technology.

For easy diecutting sharp corners should be avoided. Specific testing is required.

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 2.

RoHS / Regulation 2002/95/EU

The substances listed in article 4 lid 1 of 2002/95/EU (RoHS) are not intentionally used in this product. The concentration limits of these substances will not exceed the set maximum concentration limits as provided in the proposed amendment for 2002/95/EU.

Shelf life

Two years when stored at 22 ℃ and 50 %rh.





ANS603 / AJ060

Issue date: 01.10.2011

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	35,0
Aluminum	35,5
Automotive lacquered panels	35,0
Glass	37,0
HDPE	32,0
LDPE	31,0

Surface	N/25mm
PA6	36,0
Polycarbonate (PC)	37,0
Polyester (PET)	37,5
Polypropylene (PP)	34,0
Polystyrene (PS)	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 at 180° peel.

Chemical	Test Substrate	N/25mm	Visual	Edge Penetra-
			appearance	tion (mm)
Ad Blue ¹	Stainless Steel	28,0	No change	0
Biodiesel	Stainless Steel	35,0	No change	0
Bioethanol E85 ²	Glass	29,0	No change	2
Brake Fluid ³	Glass	35,7	No change	0
Diesel ⁴	Glass	34,5	No change	0,5
Engine Oil ⁵	Glass	36,5	No change	0
Gasoline ⁶	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

⁶ TOTAL Euro 95



¹ Aral

² CropEnergies CropPower85

³ DOT 4 Synthetic (One Way)

⁴ TOTAL

⁵ TOTAL quartz 700, 10 W 40



ANS603 / AJ060

Issue date: 01.10.2011

Thermal Transfer Printing:

Printability - Physical Resistance

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

Ribbon	Sett	ings	Print Quality	ANSI Grade	Scratch	Tape resis-
	speed	energy			resistance	tance
Armor AXR7+	4	15	+	D^1	++	++
DNP R300	3	15	++	D^1	++	+
limak SP330	3	15	++	D^1	++	0
ITW B324	3	15	+	D^1	++	0
Ricoh B110A	5	15	++	D¹	++	++
Ricoh B110CX	3	15	+	D^1	++	++

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

Ribbon	Settings	Print Quality	ANSI Grade	Scratch resistance	Tape resis- tance
Armor APR 600	6 "/s	++	D^1	++	0
DNP TR4500	6 "/s	++	D^1	++	0
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

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	B110	APR	TR	B120
						CX	600	4500	E
Ad Blue 1	+	+	+	+	+	+	+	+	+
Anti-Freeze 2	+	+	+	+	+	+	0	0	0
Biodiesel	+	+	+	+	0	+	-	-	-
Bioethanol E85 3	+	+	+	+	0	+	-	-	-
Brake fluid 4	0	0	+	+	0	0	0	0	0
Cleaner solvent 5	+	+	+	+	+	+	-	-	-
Engine oil 6	+	+	+	+	+	+	+	+	+
Gasoline '	0	0	0	0	0	0	-	-	-
Hard wax polish8	+	+	+	+	+	0	-	-	-
Isopropanol	+	+	+	+	+	+	0	0	0
Spirit	+	+	+	+	+	0	0	0	0

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



^{++:} excellent +: good o: acceptable -: poor

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

¹ Aral

² Speedfrost "Speedfroil" 1:1 in water

³ CropEnergies CropPower85

^{4&}quot;ATE" SL DOT 4

⁵ "Caramba" Cold Cleaner

⁶ BP 15 W-40

⁷ Super unleaded

^{8 &}quot;Nigrin" Hard Wax Polish



ANS603 / AJ060 Issue date: 01.10.2011

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

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

Armor "APR5", "APR600", "AXR7+", "AXR8", Astro-Med "RV2", "R5", DNP "TR4500", "TR6075", Graficor "GC14", "GC12", Iimak "SP330", ITW "B324", Kurz "K501", Ricoh "B-110A", "B-110CX", "B120 Ex2", Pelikan "T016", "T001" and Sony "TR4500".





ANS603 / AJ060 Issue date: 01.10.2011

Appendix 2: 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, wet locations (Type A). The details are listed in the UL file number MH27538.

Group	Application Surface	Max. Temperature (°C)
Electrostatic Coated Metal A	Polyester powder coat paint	150
Electrostatic Coated Metal B	Acrylic powder coat paint	150
Electrostatic Coated Metal C	Epoxy powder coat paint	150
Metals	Bare, plated or enamelled steel; bare, anodized or enamelled aluminium	150
Plastic Group II	Polyphenylene oxide, polyphenylene sulphide	80
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 one or more of the following thermal transfer ribbons:

Armor "APR 600", "AXR7+", "AXR8", DNP "TR6075", Iimak "SP330", ITW "B324", Ricoh "B110A", "B110CX" and "B120 Ex2".





ANS603 / AJ060 Issue date: 01.10.2011

Warranty

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 or AVERY DENNISON may issue credit in such amount as it deems 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 AND NO IMPLIED WARRANTIES, WHETHER OF MERCHANTIBILITY 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, ALTERATION, 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.

