

AA647 Issue date: 15.10.2013

## Facestock

A crystal clear, gloss overlaminating polyester film with print treated surface for enhanced ink adhesion.

Basis weight:	32 g/m²	ISO 536
Caliper:	0,023 mm	ISO 534

### Adhesive

AL170 is a strong, permanent, solvent-based acrylate adhesive which is distinguished by very high ageing stability. It features very high resistance against chemicals and heat.

Type:	solvent based a	acrylate
Coat weight:		20 g/sqm
Initial Tack:	320 N/m	FTM 9 glass
Peel Adhesion:	380 N/m	FTM 2 steel 24 hrs.
Min. application	n temperature:	<b>℃</b> 0
Min. service ter	nperature:	-80 °C
Max. service te	mperature:	+150 ℃

## Liner

HF80 is a very stable siliconized hygroflat backing paper. Without back imprint.

Basis weight:	80 g/m²	ISO 536
Caliper:	0,078 mm	ISO 534
Opacity:	81 %	DIN 53147
Tensile Strength	n:80 N/15mm	MD

This liner can be used for fanfolding.

## **Total construction caliper**

0,121 mm

## **Typical Values**

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

### Applications and use

The glass clear material is suitable for overlaminating films or papers providing durable labels with high gloss, good abrasion and chemical resistance. For special requirements we strongly recommend application tests.

### Printing and conversion

Overlaminating PET 25 can be printed with conventional printing techniques. Variable information can be applied using thermal transfer, see appendix 1 for ribbon recommendations. For best scratch resistance resin ribbons are recommended.

Overlamination can be an aid to matrix stripping and automatic label dispensing of the base label material. However, due to the low calliper of this film, we do not recommend automatic dispensing by itself. For bright metallic or dark background colors a filmicliner version of this product is recommended instead.

### **UL** approval

This product is UL recognized for indoor use, the 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.



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# 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	11,5
Aluminium	18,0
Automotive lacquered panels	11,0
Glass	15,0
HDPE	3,0
LDPE	2,0
PA6	11,5
Stainless Steel	13,0

### 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 Penetra- tion (mm)
Brake Fluid <sup>1</sup>	Class	14.0		
BIAKE FIUIU	Glass	14,0	No change	0
Diesel <sup>2</sup>	Glass	12,7	No change	0
Engine Oil <sup>3</sup>	Glass	13,9	No change	0
Gasoline <sup>4</sup>	Glass	10,2	No change	4
Heptane	Glass	11,5	No change	3

<sup>1</sup> DOT 4 Synthetic (One Way)

<sup>3</sup> TOTAL quartz 700, 10 W 40

<sup>4</sup> TOTAL Euro 95



<sup>&</sup>lt;sup>2</sup> TOTAL



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### **Thermal Transfer Printing:**

Printability – Physical Resistance

Flat head printers:

Ribbon	•		Print Quality	ANSI Grade	Scratch	Tape resis-		
	speed	energy			resistance	tance		
Armor AXR7+	3	25	++	*	++	+		
Armor AXR8	3	30	++	*	++	+		
Dai Nippon R-510	3	30	+	*	++	0		
limak SP330	3	25	++	*	++	+		
ITW B324	3	25	+	*	++	+		
Ricoh B110Cx	3	30	+	*	++	+		
Sony TR6070	3	30	+	*	++	0		
Sony TR6075	3	25	++	*	++	+		
The print tests were performed with the printer Zehra 6M plus								

The print tests were performed with the printer Zebra 6M plus.

Near edge printers:

Ribbon	speed energy		Print Quality	ANSI Grade	Scratch resistance	Tape resis- tance	
Armor AXR 600	4	50	++	*	+	0	
Ricoh B120 Ec	4	50	+	*	-	+	
The print tests were perform	od with th	o printor	Avenu TTV 450	Neer Edge			

The print tests were performed with the printer Avery TTX 450 – Near Edge.

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

\*: depending on the laminated material

### **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	R-510	SP330	B324	B110 Cx	TR 6070	TR 6075	AXR 600	B120 Ec
Anti-Freeze <sup>1</sup>	+	+	+	+	+	+	+	+	+	-
Biodiesel	+	+	+	+	+	+	+	+	-	-
Brake fluid <sup>2</sup>	-	+	+	-	0	0	+	0	-	-
Cleaner solvent <sup>3</sup>	+	+	+	0	+	+	+	+	0	-
Engine oil <sup>4</sup>	+	+	+	+	+	+	+	+	+	0
Gasoline <sup>5</sup>	-	-	+	-	+	-	+	-	-	-
Isopropanol	-	+	+	+	+	0	+	+	-	-
Wax Polish 6	+	+	+	+	+	+	+	+	0	-
Spirit	0	+	+	0	-	-	+	0	-	-
+: good (no change) o: acceptable (minor change still readable) -: poor										

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

<sup>6</sup> "Nigrin" hard wax polish



<sup>&</sup>lt;sup>1</sup> Speedfrost "Speedfroil" 1:1 in water

<sup>&</sup>lt;sup>2</sup> "ATE" SL DOT 4

<sup>&</sup>lt;sup>3</sup> "Caramba" cold cleaner

<sup>&</sup>lt;sup>4</sup> BP 15 W-40

<sup>&</sup>lt;sup>5</sup> Super unleaded



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# Appendix 2: Compliance Data

### **UL – Underwriters Laboratories**

File Number: MH27538

This material is UL approved as pressure-sensitive overlamination for producing finished printed labels. The conditions of acceptance are:

- Affixed to polyester label material, maximum temperature 125 °C, minimum temperature -40 °C. Suitable where exposed indoors to high humidity or occasional exposure to water.
- Affixed to vinyl label material, maximum temperature 60 °C, minimum temperature -40 °C. Suitable where exposed indoors to high humidity or occasional exposure to water.

The UL certification includes the printing with one or more of the following thermal transfer ribbons: Armor "AXR7+", "AXR600", DaiNippon "R510", Ricoh "B110CX", "B110C" and Sony "TR5075"



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### Warranty

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