



Label, White MATT Polyester, Permanent acrylic PS, blank, 50.8 x 25.4 mm

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Drawing Number: DK012-05-05-26		NR Revision 0 1 2 3 4 5 6 7 8 9		
Date:	05.05.2026	Print/Cut Tolerance	Thickness Tolerance	Scale
SAP PN: N/A		± 0.5 mm	See Material Data Sheet	1:1
MPN: LTT-4165-S05080254001-10k-A76-001			Format A4	
Material: LTH-4165 - Polyester Matt White				

Applications and Use

This face-stock was specifically developed for labelling electronic, home appliance and other electrical items. The surface is designed for thermal transfer and conventional print and features good chemical resistance. The adhesive is specifically developed for labelling electronic, home appliance and other electrical items due to its good bonding performance on a wide range of polar and apolar surfaces including metals, polycarbonate, ABS and polypropylene.

Construction

FACE STOCK  Recycled (PCR) polyester.
ADHESIVE  Acrylic Adhesive
RELEASE LINER  Supercalendered glassine paper

Facestock

A polyester based film with a satin-matt topcoating for very good ink anchorage. The film is made with Post Consumer Recycled (PCR) polyester. 30% of the PET film is made from recycled PET resin.

Basis Weight 55 g/m² ISO 536
Caliper 50 µm ISO 534

Adhesive

A permanent acrylic adhesive with good initial tack and high ultimate adhesion. Emulsion Acrylic.

Adhesive Type
Adhesive Coat Weight 27 g/m² FTM12
Adhesive Performance

Offers good initial tack and high ultimate adhesion onto a variety of substrates including apolar plastics and lacquers, as well as good resistance to solvents and cleaners. The adhesive has high cohesion and can be used for labelling curved or round substrates.

Liner

White, a supercalendered glassine paper

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

Laminate

Total Caliper 134 µm±10% ISO 534

Performance Data

Initial Tack 12 N/25mm FTM 9 Glass
Peel Adhesion 90° 10.5 N/25mm FTM2 st.st.
Min. Application Temp. 5 °C
Service Temperature -40 °C to +150 °C

Compliance and Approvals

This product is UL and C-UL recognized (UL 969, CSA C22.2 No. 0.15) Category PGJ12), for indoor and outdoor use.

Performance Data

Peel Adhesion:FTM1: 180°, 300 mm/min, dwell time: 48 hours

Surface	N/25mm
ABS	13,0
Aluminium	11,5
Automotive lacquered panels	10,5
Glass	12,0
HDPE	7,5
LDPE	8,0
PA6	10,5
Stainless Steel	15,0

Conversion and Printing

This film was developed for producing industrial labels carrying thermal transfer print. Best results can be achieved using resin or wax/resin ribbons. Additionally it can also be printed by all conventional roll label techniques, such as flexo, UV letterpress, silkscreen. Printing tests are recommended, especially with lowmigration inks. Using UV inkjet technology is possible, but due to the characteristics of the matt topcoat the image sharpness might not be satisfactory. Enabling good performance on a wide range of substrates, combined with the specific coat weight, this adhesive has a certain risk of oozing. Rotary die cutting and tools optimised for this material are recommended.

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.

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	11,5	No change	0 mm
Biodiesel	Glass	11,0	No change	0 mm
Bioethanol E85	Glass	11,5	No change	2 mm
Brake Fluid	Glass	11,0	No change	0 mm
Diesel	Glass	11,0	No change	0 mm
Engine Oil	Glass	11,5	No change	0 mm
Gasoline	Glass	8,0	No change	3 mm
Heptane	Glass	10,0	No change	3 mm
Water, distilled	Aluminium	7,5	No change	0 mm
All purpose cleaner	Glass	8,5	No change	0 mm
Bathroom cleaner	Glass	9,0	No change	0 mm
Bleach	Glass	7,5	No change	0 mm
Dishwashing detergent	Glass	9,0	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; All Purpose Cleaner: Sagrotan Sea Breeze (Reckitt Benckiser); Bathroom Cleaner: Cillit Antikalk (Reckitt Benckiser); Bleach: Danklorix (Colgate Palmoliv); Dishwashing detergent: Fairy Lemon (Procter & Gamble).

Thermal Transfer Printing
Printability – Physical Resistance:

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

Ribbon	Settings		Print Quality	ANSI Grade	Scratch resistance	Tape resistance
	speed	energy				
Armor APR6	4	10	++	A	-	-
Armor AXR7+	4	25	++	A	o	+
DNP R300	4	25	+	A	o	++
limak SP330	4	25	++	A	o	++
ITW B324	4	25	+	A	o	++
Ricoh B110A	4	10	++	A	-	-
Ricoh B110CR	4	25	++	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.

	APR6	AXR7+	R300	SP330	B324	B110A	B110 CR
Ad Blue	+	+	+	+	+	+	+
Anti-Freeze	+	+	+	+	+	+	+
Biodiesel	-	+	+	+	+	+	+
Brake fluid	-	o	o	-	o	+	+
Cleaner solvent	-	+	+	+	+	o	+
Engine oil	+	+	+	+	+	+	+
Gasoline	-	-	-	o	+	-	-
Isopropanol	-	+	+	+	+	+	+
Spirit	-	o	+	+	+	o	+

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

Chemicals: Ad Blue: Aral; Anti-Freeze: Speedfrost "Speedfroil" 1:1 in water; Brake Fluid: DOT 4 Synthetic (One Way); Cleaner Solvent: "Caramba" Cold Cleaner; Engine Oil: TOTAL quartz 700, 10 W 40; Gasoline: TOTAL Euro 95.

Note: All technical data should be considered representative or typical only and should not be used for specification purposes.

Approvals

This product meets the requirements as stated in UL 969 and CSA C22.2 No. 0.15 for indoor and outdoor use.

Compliance Data

UL ± Underwriters Laboratories (UL 969, 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 (YC)	Min Temp (YC)	I	O	Additional Conditions
Acrylic paint	150	-40	X	X	O
Acrylic powder paint	150	-40	X	X	-
Alkyd paint	150	-40	X	X	O
Aluminum	150	-40	X	X	O
Epoxy paint	150	-40	X	X	O
Epoxy powder paint	150	-40	X	X	-
Galvanized steel	150	-40	X	X	O
Polyester paint	150	-40	X	X	O
Polyester powder paint	150	-40	X	X	-
Polyurethane powder paint	150	-40	X	X	-
Porcelain	150	-40	X	X	O
Stainless steel	150	-40	X	X	O
Chromate treated metal (smooth)	100	-40	X	X	-
Melamine	100	-40	X	X	O
Nylon Polyamide	100	-40	X	X	O
Phenolic - Phenol Formaldehyde	100	-40	X	X	-
Polycarbonate	100	-40	X	X	-
Unsaturated polyester thermoset	100	-40	X	X	-
ABS	80	-	X	-	-
Polybutylene terephthalate (PBT)	80	-23	X	X	-
Polyethylene (PE)	80	-	X	-	-
Polyphenylene oxide/ether (PPOX)	80	-40	X	X	-
Polypropylene	80	-23	X	X	O
Polystyrene (PS)	80	-40	X	X	-
Polyvinyl chloride (PVC)	80	-40	X	X	-
Polyvinylfluoride (PVF)	80	-	X	-	-

I: Indoor use O: outdoor use

The UL certification includes the printing with the following thermal transferribbons: ArmorAXR1, AXR7+, APR6, APR600; DainipponR300, R550, R510, V300; limak SP-330; Italgrafica TF330, TF335P; ITW B324; RicohB110A, B110CR, B110Ti, B120E; Zebra Technologies 5095.

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, Category PGJ18.

Group	Application Surface	Max. Temperature (YC)
Metals	Bare, plated or enamelled steel; bare, anodized or enamelled aluminium	+125
Plastic Group I	Phenolic, melamines, urea formaldehyde	+100
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	PET, PBT, epoxy plastic	+80
Polyvinylfluoride (PVF)		+80

The C-UL certification includes the printing with the following thermal transfer ribbons: Armor AXR1, AXR 7+;Dainippon R300, R510, V300;ITW B324; limak SP-330;ItalgraficaTF330, TF335P; Ricoh B110C.

Disclaimer

All data to be considered as typical values and subject to change without prior notice. Further testing is always recommended.

All statements, technical information and recommendations about this product are based upon tests believed to be reliable but do not constitute a guarantee or warranty. All products are sold with the understanding that Purchaser has independently determined the suitability of such products for its purposes.