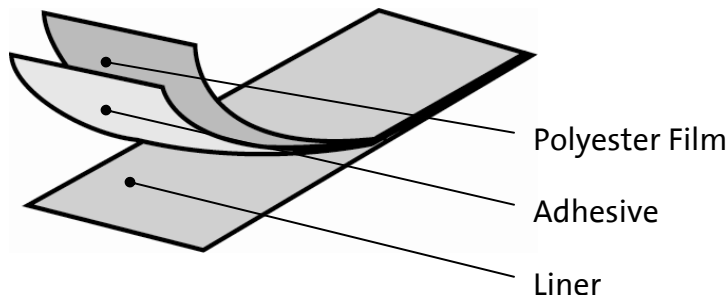


POLYMASTER HL

9.18.00.05.00.13



Structure and Characteristics

Manufacturing Process:	Photo Setting
Base Material:	Polyester Film 0.08 mm
Adhesive:	HL
Liner:	ca. 0.078 mm
Label Thickness (without Liner):	ca. 0.162 mm

Modified acrylate adhesive, permanent bonding. Diffusion-free.

Conforms to the provisions of Regulation (EC) No. 1935/2004 on materials and articles intended to come into contact with food. Moreover, the adhesive strips are approved in accordance with DIN EN ISO 3826-1 „Plastic collapsible containers for human blood and blood components. Part 1: Conventional containers“, April 2004 edition, as these are proven to have no hazardous effects on the blood.

Extremely scratch-resistant and moisture-resistant, as the barcode information is photoset onto the polyester material. Minimal lateral contact surface due to single component structure.

Typical Uses and Applications

Warehouse shelf labelling, high-quality name plates, varnished metal surfaces, media labelling

Processing Instructions

When processing this product, please refer to the corresponding processing instruction sheet FB 362 - Processing Instructions for Barcode Labels.

Test Results

Adhesion

Peel Strength	after 20 min	after 24 h		Adapted from FTM 1
Glass	17	19	[N/20mm]	
Steel	17	19		
Polypropylene	12	15		
Polyethylene	13	15		

Chemical Resistance

Testing in the following liquids on a metal base at room temperature, ca. 21°C

Petroleum Spirit	24 h	Salt _{aq}	24 h
Antifreeze	24 h	Acetic acid	24 h
Diesel	24 h	Acetone	24 h
Soap Lye	24 h		
Distilled Water	24 h		

Testing in liquids on a PE base at higher temperatures

Soap Lye (NaOH + Cleanser)	70°C, 20 min		
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Attrition Test with the following liquids

MEK (Methyl ethyl ketone)	1,000	Abrasive Movements	1kg /1cm ² ; Run length ca. 20 cm
IPA (Isopropanol)	1,000		

Resistance to Washing

Wash Test on a PE base with the following parameters (direct positioning of the nozzle toward the label)

Water (11.9°dH), 20 bar, +30° C	150 nozzle movements over the label. Nozzle type: high pressure stream 25°, Kärcher 47671500, Process speed: 80mm/s Distance nozzle – test plate: 50mm	No separation of the label is visible
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Resistance to Mechanical Wear

Hardness Measurement on protective surface layers

Testing on a PP base	20	[N]	Erichsen Hardness Test Pencil Model 318 / van Laar testing geometry (0.5mm)
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Attrition Test on protective surface layers

Label to be tested is affixed to a cardboard tube	10,000	[R]	14 rpm; 1kg/ 4mm ²
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UV Resistance

Weathering Test

Label to be tested is affixed to a glass surface	1,226	[h]	Adapted from ISO 11341 Cycle A (exposition) and C (weathering)
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Temperature Resistance

Cold / Heat Test

Labels are attached to a PP test plate	Label does not detach from the PP test plate	-32°C / 24h
		+100°C / 4h

Important Notice

All information presented here is based on results from our internal tests. This does not obviate the need for every user to independently ensure that the product is suitable for the foreseen application.