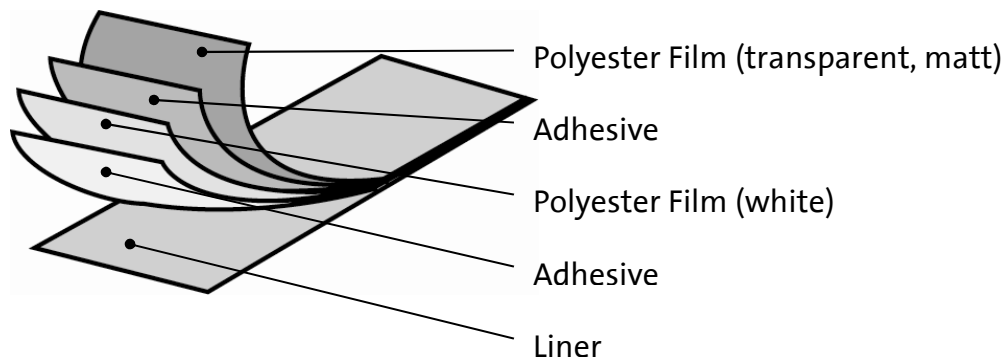


# DIOMASTER HPV MATT

4.156.04.01.00.35



## Structure and Characteristics

Manufacturing Process:	Digital Printing
Base Material:	Polyester Film (transparent, matt)
Adhesive:	Permanent
Material:	Polyester Film (white)
Adhesive:	HPV
Liner:	approx. 0,052 mm
Label thickness (without liner):	approx. 0,297 mm

Extremely robust due to reverse printing. Scratch and smear-resistant as the barcode is protected with a polyester film. Due to the strength and tear resistance of the material the label can also be tacked.

Multi-colour logos, fonts, graphics and photos are possible.

The adhesive HPV is in accordance with the provisions of Regulation No. (EG) 1935/2004 of the European Parliament and of the Council of October 27<sup>th</sup> 2004 for materials and articles with food contact. The adhesive also complies with the requirements of German Foods, Consumer Goods and Feedstuffs Codes (LFGB) in its version of June 3<sup>rd</sup> 2013 BGBl.IS.1426.

## Typical Uses and Applications

Palette labelling, inventory labelling, warehouse shelf labelling, container identification.

## 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	[N/20mm]	Adapted from DIN EN 1939
Glass	42	45		
Steel (1.4301 polished)	44	46		
Polypropylene	36	38		
Polyethylene	30	32		

**Chemical Resistance**

Testing to the following liquids:

Test condition / Time period	1h **)	2h **)	6h **)	24h **)	**) Labels are affixed to a metal surface. After 24 hours they were placed in a water bath at a temperature of approx. 21°C.
Petroleum Spirit	ok	-	-	-	
Heptane	ok	-	-	-	
Antifreeze	ok	ok	ok	ok	
Diesel	ok	ok	ok	-	
Soap Lye	ok	ok	ok	ok	
Cold Cleaning Solvent	ok	ok	ok	ok	
Distilled Water	ok	ok	ok	ok	
Salt Lye	ok	ok	ok	ok	
Acetic acid 80%	ok	ok	ok	ok	
Acetone	ok	-	-	-	

Testing in liquids at higher temperatures

Soap Lye (1,0% NaOH + 0,5% P3 Aquanta XTR)	<b>70°C, 40 min.</b>
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Attrition Test with the following liquids

MEK (Methyl ethyl ketone)	>500	<b>Abrasive Movements</b>	10N /1cm <sup>2</sup> ; Over the entire length of the label
IPA (Isopropanol)	>500		

**Resistance to Washing**

Wash Test on a PP surface with the following parameters (direct positioning of the nozzle to the label)

Water (0°dH), 50 bar, Up to +80° C	150 nozzle movements over the label. Nozzle type: High pressure steam 40 °, Kärcher 2.884-523, Process speed: 80 mm/s Distance nozzle – test plate: 50mm	No visible separation of the label
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**Resistance to Mechanical Wear**

Hardness Measurement on protective surface layers

Testing on both a PP and a metal surface	10	[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	>15.000	[U]	14 rpm; 10N/ 4mm <sup>2</sup>
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**UV-Resistance**

Weathering Test (Colour: prozess black) Further colours upon request!

Label to be tested is affixed to a glass surface	>1.000	[h]	Adapted from ISO 4892-2, method A, cycle 2
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**Temperature Resistance**

Cold / Heat Test

Label to be tested is affixed to a PP surface	Label does not detach from the surface	-40°C / 24h
		+100°C / 24h

**Important Notice:**

All information represented 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. Unless statutory provisions stipulate otherwise our General Terms and Conditions covering all matters concerning warranty and liability are applicable to this product.

**DIOMASTER HPV MATT**  
 Technical Data Sheet – Subject to change