

Technical Data Sheet

LUV 3990 series

IMAGin

The IMAGin products is a series of self-adhesives especially designed for overlaminating and protecting large and medium size digital prints. The LUV range of products has specifically been designed for the protection of digital UV prints. It is however also compatible with other standard digital printing techniques like SB, eco-solvent and latex inks.

PRODUCT DESCRIPTION

- LUV 3990 series are soft 80 µ PVC coated on one side with a clear acrylic pressure sensitive adhesive. The adhesive is protected by a white, easy to remove paper liner.
- LUV 3998 has a matt finish. LUV3399 has a glossy finish.

LUV 3990 series of laminate

- retard colour fade caused by ultraviolet (U.V.) light exposure
- enhance colours and glossiness of the UV prints
- protect the UV inks against abrasion, fingerprints etc
- have a high tack adhesive suitable for laminating both UV, SB and ecosolvent digital prints
- do not influence the pH level of the substrate to which it is applied.
- are not compatible with substrates printed with oil-based inks.

PHYSICAL PROPERTIES

	<u>Typical value</u>	<u>Test Method</u>
<u>Adhesive data, 23°C</u>		
Quick Tack on glass (N/25 mm)	13	FTM 9
Peel 180° on glass (N/25 mm)		
- after 20 minutes	19	FTM 1
- after 24 hours	22	FTM 1
Shear (hours) 1kg- 25x25 mm	>1000	
Dimensional stability, % shrinkage, 48h at 70°C on aluminium	<0.5	FTM 14 Sample mounted on aluminium
Flammability	Self-extinguishing	
<u>Release liner</u>		
White clay coated kraft paper (g/m ²)	140	ISO 536
<u>Thickness</u>		
Film + adhesive (µm)	110	ISO 534 (ASTM D 645)

HEAT RESISTANCE

Application temperature range : + 5°C to + 40°C

End-use temperature range : - 30°C to + 60°C

For temperatures outside those quoted above, please consult with MACtac.

CHEMICAL RESISTANCE

Resistant to short periods of immersion in water and short contact with detergents, alcohol and some aliphatic solvents. Not recommended for contact with ketones, esters, aromatic solvents and chlorinated hydrocarbons.

For further technical advice, please consult with MACtac.

SHELF LIFE

2 years when stored at 15 to 25°C and ± 50 % relative humidity.

DURABILITY

LUV 3990 series will give satisfactory performance up to 5 years of outdoor exposure.

The durability does not relate to the image protected but only to the laminating film.

Indoor exposure will increase the durability values of the laminating film.

Note : *These end-use life estimates are based on accelerated ageing studies and outdoor exposure, under conditions experienced in vertical exposure and in "normal" temperate climates. Exposure to severe humidity and ultraviolet light, as in southern European countries, and also in tropical, sub-tropical or desert regions, will cause a more rapid deterioration. This also applies to polluted areas, high altitude, horizontal and /or south-facing exposure Please refer to our Product Warranty for more information..*

RECOMMENDATIONS

- Where exposure to chemicals, solvents or high pressure water hoses is envisaged, it is recommended to seal the edges of the prints with varnish or silicone in order to avoid penetration of these liquids.
- Where possible, always test the proposed construction under actual application and end-use conditions because a 100% multi-purpose adhesive for all substrates does not exist.
- When laminating LUV 3990 series onto UV prints, set the temperature of the laminator to ~40-50°C to eliminate risks of silvering.

IMPORTANT NOTICE

All MACtac products are subject to careful quality control throughout the manufacturing process and are warranted to be of merchantable quality and free from manufacturing defects.

Published information concerning MACtac products is based upon research which the Company believes to be reliable although such information does not constitute a warranty.

Because of the variety of uses of MACtac products and the continuing development of new applications, the purchaser should carefully consider the suitability and performance of the product for each intended use, and the purchaser shall assume all risks regarding such use. The seller shall not be liable for damages in excess of the purchase price of the product nor for incidental or consequential damages.

All specifications are subject to change without prior notice.