



Technical Data Sheet

PERMATRANS 2113

PERMACOLOR

The PERMACOLOR system is a series of pressure-sensitive products used for mounting and protecting in the photographic and graphic industries. Pressure-sensitive PERMACOLOR provides fast, efficient processing through roll lamination techniques without the need for heat or drying.

PRODUCT DESCRIPTION

PERMATRANS 2113

- is a double-sided, highly transparent mounting film, using a 36 μ super clear polyester carrier, with a smooth coating of solvent acrylic adhesive on both sides. Both sides of the adhesive are protected with clear polyester release liners that permit complete visual inspection of the product.
- has been designed for mounting of photographs, cibachromes and large size transparencies onto glass, acrylic glass, etc.
- does not influence the pH level of substrate to which it is applied.

PHYSICAL PROPERTIES

- THOIGHE THOI ETTILE	Typical values		Test method
Adhesive	End user	Converter	
Quick Tack on glass (N/25 mm)	16	16	FTM 9
Peel 180° on glass (N/25 mm) - after 20 minutes - after 24 hours	13 16	13 16	FTM 1 (ASTM D 903-49) FTM 1 (ASTM D 903-49)
Shear on glass (hours) 1 kg - 25 mm x 25 mm	1000	1000	FTM 8
Release liner			
Transparent polyester 36 μ (gr/sqm)		50	ISO 536
<u>Thickness</u>			
Carrier + adhesive (μ)		80	ISO 534 (ASTM D 645)

HEAT RESISTANCE

Application temperature range $: + 5^{\circ}\text{C}$ to $+ 40^{\circ}\text{C}$ End-use temperature range $: -30^{\circ}\text{C}$ to $+ 100^{\circ}\text{C}$

For temperatures outside those quoted above, please consult MACtac.

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CHEMICAL RESISTANCE

Resistant to water, detergents, alcohol, and some aliphatic solvents.

Not recommended for use in contact with ketones, esters, aromatic and chlorinated hydrocarbons.

For further technical advice, please consult MACtac.

SHELF LIFE

2 years when stored at 15 to 25 $^{\circ}$ C and \pm 50 $^{\circ}$ 6 relative humidity.

EXPECTED DURABILITY

The expected vertical outdoor durability of the unprocessed product in Central Europe (Zone 1) is up to 3 years. This information is based on successful real life experience and artificial aging according to ISO4892-3.

<u>Indoor</u> exposure will increase the durability values of the mounting film (up to 20y in standard storage conditions and with good printing ink quality).

<u>Note</u>: Exposure to severe temperatures, ultra-violet light as well as conditions in Southern European countries, tropical, sub-tropical or desert regions will cause more rapid deterioration. This also applies to polluted areas, high altitude and south facing exposure. No durability warranty is given for horizontal exposure. For more information, please refer to Technical Bulletin 7.5: "Outdoor Durability of combined MACtac print media and laminates".

RECOMMENDATION

When using **PT 2113** onto polycarbonate, polystyrene, polymethyl-methacrylate substrates, it is recommended to conduct compatibility tests in normal use conditions. These types of panels tend to «degas» when exposed to temperature, creating bubbles and/or tunnels between the panels and the mounting film. Conditioning these panels overnight in a room above 60 ℃ before mounting helps prevent damage occurring. For more information, please refer to Technical Bulletin 7.2 "Mounting of inkjet prints on Acrylic or Polycarbonate Sheets".

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.

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