



Technical Data Sheet

PERMAFLEX 6400

PERMACOLOR

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

PRODUCT DESCRIPTION

PERMAFLEX Series is a family of thick films that are coated with acrylic pressure-sensitive adhesive on one side. These unique films are particularly suitable to protect digital prints used as floor graphics from abrasion due to pedestrian traffic. They can also be laminated to either one or both sides of photographic prints or transparencies to protect, enhance appearance and provide sufficient rigidity to eliminate the need for mounting to traditional flat substrates in many applications. These laminates also retain enough flexibility to allow images to be used in non-flat configurations such as on cylindrical displays. This feature also permits the laminate to be rolled for easy transport or storage.

PERMAFLEX 6400

- is a 125 µ clear matt PP film with a textured lustre finish that eliminates some glare and provides a very pleasing finish
- does not influence the pH level of the substrate to which it is applied.
- is recommended as an overlaminate for indoor applications.
- is approved by ASTM C 1028-2007 "Friction Test" for slip resistance.

Note : as any flooring material, can be slippery when wet or dirty

PHYSICAL PROPERTIES	Touriset as here a	To at worth a d
Adhesive	Typical values	Test method
Quick Tack on glass (N/25 mm)	17	FTM 9
Peel 180° on glass (N/25 mm) - after 20 minutes - after 24 hours	18 14	FTM 1 FTM 1
Shear on glass (hours) 1 kg - 25 mm x 25 mm	>1000	FTM 8
Gloss (85° angle)	10	ASTM D-523
Dimensional stability - MD - CD	<0.1 % <0.1 %	FTM 14
<u>Thickness</u>		
Film + adhesive (µ)	160	ISO 534 (ASTM D645)

HEAT RESISTANCE

Application temperature range	: 5℃ to + 40℃
End-use temperature range	: - 30 ℃ to + 60 ℃

For temperatures outside those quoted above, please consult MACtac.

SHELF LIFE

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

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 MACtac.

EXPECTED DURABILITY

The expected durability of the unprocessed product in Central Europe (Zone 1) is:

- up to 1 month when used in the production of indoor floor graphics
- up to 3 y when used as indoor vertical display

This information is based on successful real life experience and artificial aging according to ISO4892-3.

Note: 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".

RECOMMENDATIONS

Care should be taken to protect the sides of the laminate with silicone in order to avoid water infiltration (in case of cleaning for example).

PERMAFLEX 6400 should be maintained clean to keep its slip resistance.

Due to the increasing number of new printing methods appearing on the market, it is important for the Converter to satisfy himself about the suitability of PERMAFLEX 6400 for the application to the printed image.

<u>Storage</u>

MACtac recommends that rolls be stored on end or suspended from the core.

<u>Transport</u>

- allow the maximum amount of time after lamination, preferably overnight, before rolling for transport,
- roll the largest diameter possible, no less than 30 cm diameter,
- roll with the PERMAFLEX to the outside.

<u>Trimming</u>

- allow at least one hour after lamination, 24 hours optimal,
- support PERMAFLEX 6400 fully from below.

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.