

Specialities: PERMASUN 2960

GENERAL
INTRODUCTION

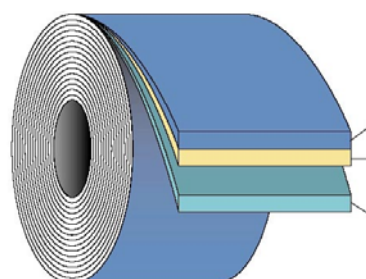
Specialities

-is a range of high technology self-adhesive products, developed for specific industrial applications, particularly in the medical, optical or security fields, etc.

PRODUCT
DESCRIPTION

Permasun 2960

- is a patented solar control film. It consists of a soft UV stabilized metallized film on the underside which gives a dramatic reduction of the incoming solar heat by continuously reflecting it away.
- is coated with a clear solvent based acrylic adhesive, UV stabilised, very cohesive and extremely durable.
- can be applied to all polycarbonate, GRP and plastic substrates. Internal application is advised.



UV stabilized
metallized film
Solvent based pure
acrylic adhesive
Clear PET film

SOLAR
PROPERTIES

	Permasun 2960 (non applied)	Permasun 2960 laminated to the external of a 4mm clear glass.
Visible light transmitted	21.7 %	21.1 %
Visible light reflected	41.3 %	41.6 %
Visible light absorbed	37 %	37.3 %
Ultra violet block	99.6 %	99.6 %
Total solar energy reflected	39.2 %	40.5 %
Total solar energy rejected	-	65.6 %
Total solar energy transmitted	20.4 %	18.4 %
Total solar energy absorbed	40.4 %	41.1 %
Shading coefficient	-	0.33

Solar Properties: Measures found by an external official laboratory on the film and the film applied on a clear 4mm glass, in accordance to the EN410 test method.

PERMASUN 2960 is accomplishing its solar heat gain rejection through absorbing a large solar spectrum, preventing its direct entry into your home. As a consequence, under high summer temperature, PERMASUN 2960 will heat up. It is therefore advised to check: the stability of the panels to thermal stress. Co-extruded panels are more stable to heat. The roof plates should resist to temperature above 100°C. Ventilation is also a very important consideration in controlling high summer temperatures. A space should be allowed between the panels and the frame to permit the physical expansion.

Please refer to the official MACTAC document - PERMASUN 2960- Product Warranty

RESISTANCE

Resistant to water and all usual detergents and alcohol.
Permasun is very sensitive when exposed to agents of pollution such as metallic ions (Pb, Fe).

SHELF LIFE

1 year when stored at 15 to 25°C and ± 50 % relative humidity.

ADHESIVE DATA

	TYPICAL VALUES (*)	TEST METHOD
Peel 180° on glass (N/25 mm)		
- after 20 minutes	11	FTM 1
- after 24 hours	13	
Quick tack on glass (N/25mm)	15	FTM 9
Shear on glass (hours) 1kg – 25 mm x 25 mm	500	FTM 8

FILM DATA

Thickness (µ)	80	ISO 534
Dimensional stability: shrinkage (%) (48 hours at +70°C)	< 0.5	ISO 534
Minimum application temperature	0°C to + 40°C	
End-use temperature range	- 30°C to + 100°C	
<i>For temperatures outside those quoted above, please consult with MACTac</i>		

RELEASE LINER

Clear PET 36 µ and 50 gr/sqm

ISO 536

THICKNESS (Film + Adhesive)

95 µ

ISO 534

(*) Values given are typical and are not necessarily for use in specifications.

ADDITIONAL INFORMATION

WARRANTY: The **Permasun 2960** professionally applied carries an 8 years manufacturer's warranty when applied internally. This warranty carries against: peeling, cracking and discoloration. Please read and fill in the official MACTAC document – "PERMASUN 2960- Product Warranty" .

This product contains more than 0.1% (w/w) of Bis (2-ethyl(hexyl)phthalate) (DEHP) CAS number 117-81-7. You can find more information on this substance on <http://www.dehp-facts.com/>

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 are based upon research which the Company believes to be reliable but such information do not constitute a warranty. Because of the variety of possible uses for MACTac products and the continuing development of new uses, the purchaser should carefully consider the fitness and performance of the product for each intended use and the purchaser assumes all risks in connection with such use. Seller shall not be liable for damages in excess of the purchase price of the product or for incidental or consequential damages. All specifications are subject to change without prior notice.