MACscreen®

Product data : PolyScreen 29 / 99 – LONG LIFE PERMANENT

DESCRIPTION

Face stock :
Polymeric stabilized calendered soft vinyl, cadmium free, ~ 70 µm.

PolyScreen 29 : Gloss White
PolyScreen 99 : Gloss Transparent

Adhesive : Durable Permanent high-performance, acrylic based.

Liner : Coated Kraft paper, ca. 130 g/sqm : without breaklines.

Laminate : ca. 250 g/sqm

PHYSICAL AND CHEMICAL CHARACTERISTICS

(TYPICAL VALUES)

Peel adhesion 180° on stainless steel :

30 min. : 0,66 kN/m	ASTM D-903
1 week : 1,00 kN/m	ASTM D-903

Dimensional stability (applied) : < 0,5 % FTM 14, alu

Face material data :

Tensile strength : 1,17 kN/m	DIN 53455
Elongation at break : min. 100 %	DIN 53455

Temperature range :
Min. application temperature : + 10° C
Service temperature range : - 40° C to + 90° C

Flammability : Self-extinguishing ISO 3795

Solvent resistance : good properties.
Applied to stainless steel, exposed to : oils, greases, aliphatic solvents, alcohols.

Petrol resistance : good properties.
Repeated (each 10 min.) petrol spraying.

Chemical resistance : No effect.
Mild acids. Mild alkalis.

Shelf life : stored at 50 ± 10 % RH at 15 - 25° C.
2 years for as long as the material is being stored in its original packaging.

Durability :

- *Unprinted films* : 7 years (white) 5 years (transparent). Middle European exposure conditions, vertical exposure.

- *Printed films* : satisfactory performance for up to 7 years can be obtained with some inks and varnishes. However assurance of ink performances in all cases should be first obtained from the ink supplier.
These end-use-life estimates are based upon accelerated ageing studies and outdoor exposure, under conditions experienced in vertical exposure and in "normal" temperate climates.

Exposure to severe humidity, ultra-violet light or conditions found in tropical, subtropical or desert regions will cause more rapid deterioration than under conditions existing in "normal" temperate climates.

PRINTING METHODS

Screen printing.
For UV Offset or conventional offset, please contact your ink supplier.
During printing, it is important that drying is carefully exercised to ensure removal of printing inks solvents since certain solvents if retained can lead to plastification problems with subsequent application troubles and poor weathering properties.
We recommend to maintain an unprinted area of 3-4 mm on the edges of the printed decal to avoid edge lifting.

APPLICATIONS AND USES

Polyscreen series is designed for permanent interior and exterior marking applications which have a long-term requirement. Good conformability to simple contours and flat surfaces and ideally suited for vehicle markings, containers, etc…

GENERAL REMARK : factors affecting adhesion

Adhesion failure problems can be avoided by :

- *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.*
- *Being familiar with factors which adversely affect adhesion :*
- *Labels or stickers should not be applied onto dusty, dirty, oily or oxidized surfaces.*
- *Mould release agents on blow-moulded plastic surfaces inhibit adhesion.*
- *Adhesion failure may occur on substrates with low surface tension, such as polyethylene or polypropylene.*
- *Do not use pressure sensitive materials outside the recommended service temperature range, or do not apply below the minimum application temperature.*