

MAClite 5700

Technical Data Sheet

PRODUCT DESCRIPTION

MAClite 5700 is a flexible reflective film (Engineering Grade) providing wide-angle reflectivity of incident light and giving excellent night and day visibility.

The film consists of a layer of microscopic glass beads of high optical quality embedded in a coloured film and react as lenses. A metallized back provides the mirror surface for reflection. Thanks to its flexibility, MAClite 5700 is easy to cut and to weed and can be applied on curved or corrugated surfaces.

CONSTRUCTION

Face material :

Flexible Engineered Grade reflective film ± 115 µm thick.

Adhesive :

High quality white solvent based permanent acrylic adhesive.

Liner :

Highly stable 150 gsm white polyethylene coated paper.

TYPICAL USES

MAClite 5700 is a marking film designed for 24 h a day eye-catching decoration and identification.

MAClite 5700 is designed for vehicle markings where application on riveted or corrugated surfaces may be required.

REFLECTIVITY

At -4° entrance angle and 0.2° observation angle MAClite 5700 has the following typical coefficient of retro reflection (cd/lx/sqm)

Reference		Typical retro reflection
MAClite 5729-00	White	70
MAClite 5709-00	Yellow	50
MAClite 5701-00	Orange	20
MAClite 5759-00	Red	5
MAClite 5739-00	Light Blue	6
MAClite 5739-01	Dark Blue	4
MAClite 5749-00	Green	7
MAClite 5789-00	Black	3

EXPECTED DURABILITY

The expected vertical outdoor durability of the unprocessed product in central Europe (Zone 1) is up to:

5-7 years.

This information is based on successful real life experience and artificial aging according to ISO 4892-2.

Note : Exposure to severe temperatures and ultraviolet light, as well as conditions 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 south-facing exposure.

SHELF LIFE

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

PHYSICAL PROPERTIES (Average values)

Thickness (mm) (Film + adhesive) ASTM D-645
0.150

Face Material Data, 23°C DIN ISO 527-3

Tensile strength : > 16 N/15mm

Elongation at break : ≥ 100 %

Adhesive Data, 23°C FTM 1

Peel adhesion 180° on stainless steel (N/25mm)

- 20 min. residence : 24

- 1 week residence : 34

Dimensional stability FTM 14

Shrinkage (48 hours at 70°C) : < 0.5mm

Temperature ranges

Application : +10°C to + 40°C

End-use : - 20°C to + 90°C

Solvent and chemical resistance

Resistant to most oils and grease, fuel, aliphatic solvents, weak acids, salts and alkalis.

PROCESSING

Printing

MAClite 5700 can be printed with some screen inks and varnishes. However assurance of ink performance in all cases should be first obtained from the ink supplier.

Computer cutting

Clean, quick, trouble-free cutting with most plotters.

Application

The transfer of the cut material onto the Application Tape should always be performed by removing the liner from the pressure-sensitive material (i.e. with the film downwards onto the working surface) and not by lifting off the Application Tape.

MAClite 5700 can be applied with the dry application method on slightly curved, riveted and embossed surfaces with the aid of a heat gun.

Important remark

All surfaces to which the material will be applied must be thoroughly cleaned from dust, grease or any contamination.

The compatibility of paints and lacquers should be tested by the end-user, prior to use.

Edge sealing and varnishing

Where exposure to chemicals and solvent spillage is likely to occur, edge sealing of decals with a varnish will prevent edge lift. Correct varnishing of decals gives greater protection, and extends the use-life against prolonged effects of weathering, abrasion and other effects such as frequent cleanings.

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 believes to be reliable although such Company information does not constitute a warranty.

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