MACscreen

MACal® 8128 / 8129 / 8199 – REMOVABLE

Technical Data Sheet

DESCRIPTION

Face stock :
Soft calendered PVC films, ~ 100 µm, cadmium-free, dull or gloss finish.

> **Macal® 8128** : Dull White
> **Macal® 8129** : Gloss White
> **Macal® 8199** : Gloss Clear

Adhesive : Removable acrylic water based.

Liner : Coated Kraft paper, ca. 140 gr/sqm.
- Secury 13 (without breaklines)
- Macline® (with mechanically scored breaklines 6 cm apart).

Laminate : ca. 270 gr/sqm.

PHYSICAL AND CHEMICAL CHARACTERISTICS
(TYPICAL VALUES)

Quick tack	: 5.5 N/25 mm	FTM 9, on glass
Peel 20 min.	: 5.5 N/25 mm	FTM 1, on glass
Peel 24 h.	: 6.5 N/25 mm	FTM 1, on glass
Resistance to shear	: > 3 h	FTM 8, on glass

Dimensional stability (applied) :
max. 1.5mm   FTM 14, alu

Dimensional stability on the backing paper (unapplied) :
max. 1.5mm   Measured after 72 h at 60°C

Temperature range :
Minimum application temperature : + 5°C
Service temperature range   : - 20°C to + 70°C

Flammability : Self-extinguishing.   ISO 3795

Toy labelling : in compliance with EN 71/3 – BS 5665

Solvent resistance :
Resistant to most oils, greases, aliphatic solvents, alcohols.

Petrol resistance : Resistant to short limited contacts.
If extended contact, edge-lifting will occur.

Chemical resistance :
Resistant to most 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.

Expected durability :
The expected vertical outdoor durability of the unprocessed product in central Europe (Zone 1) is up to:
2 years.
This information is based on successful real life experience and artificial aging according to ISO 4892-2.

Middle European exposure conditions, vertical exposure. 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.

REMOVABILITY

Up to one year, after application, on many surfaces.
NB : The removability of MACal 8128, 8129 and 8199 coated with the Removable adhesive is borderline (adhesive residue or increase in adhesion onto the substrate with time) on the following substrates : polystyrene, nitrocellulose painted surfaces and soft PVC.

PRINTING METHODS

Screen printing / UV Offset.
For 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.
For solvent digital printing, we recommend the use of MACtac IMAGin JT 5000 products.

APPLICATIONS AND USES

Stickers for advertising and promotional campaigns, emblems and printed labels for in- and outdoor use.
NB : Wet method for the application of large printed decals is not recommended.

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.*

- *Avoid the use of relatively rigid facestocks on highly curved or small diameter surfaces.*

- *Do not use pressure-sensitive materials outside the recommended service temperature range, or do not apply below the minimum application temperature.*