



# POLYESTER FILMS TC 25 µm – PERMANENT

### Technical Data Sheet

#### DESCRIPTION

Face stock:

Polyester films, top coated for ink receptivity.

- **MILMAR T.C. 25 μm**:

Bright Silver Dull Silver

Adhesive: Permanent high-performance, acrylic based.

Liner: Mercury.

Bleached Kraft paper, ca. 160 gr/sqm, two-side polyethylene coated, without breaklines and backprinting.

Backing with excellent dimensional stability.

Laminate: ca 220 gr/sqm

# PHYSICAL AND CHEMICAL CHARACTERISTICS

(TYPICAL VALUES)

N/25 mm on glass Peel 20 min. Peel 24 h. FTM1 FTM 1

16 11 14

**Resistance to shear**: > 1000 h FTM 8, on glass

Dimens. stability (applied): no shrinkage FTM 14, alu

**Dimens. stability on the backing paper** (unapplied) no shrinkage Measured after 72 h at 60°C

**Temperature range:** 

Min. application temperature: +10°C

Service temperature range :  $-20^{\circ}$ C to  $+130^{\circ}$ C

**Burning behaviour**: Flammable ISO 3795

**Toy labelling**: in compliance with EN 71/3

**Food contact**: approval for indirect application on dry or moist, non-fatty food ISEGA/BgVV

**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  $50 \pm 10 \%$  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:

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.

## PRINTING METHODS

The special topcoating allows printing solvent based by screen printing.

For letterpress and offset printing, please contact your ink supplier.

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

- Milmar clear: transparent labels, two-way signs and windows emblems, protective covering of documents.
- Silver films: luxury labels for household or industrial appliances, audio and video equipment, calculators, nameplates, toys, panels for decorative purposes, luxury packaging for perfumery or jewellery.

#### **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. Rubber based adhesives stick better to low energy surfaces than acrylics.
- 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.