

01.01.2025

PET white glossy

Permanent

Description

PET white glossy has been developed for subsequent labelling in thermal transfer printing process. Due to the homogeneous material surface, an extensive, opaque color transfer is possible. The film is also characterized by an excellent adhesion to low-energy substrates such as polyethylene and polypropylene. Equipped with glassine backing papers, PET white glossy is recommended for automatic dispensing systems. In addition this product is also UL-certified (MH61146).

Construction

Product / Color	Foil Thickness in mm	Adhesive thickness in mm	Backing paper thickness in mm (g/m ²)	Backing paper
PET white glossy	0,053	0,020	0,056 (62)	Glassine paper, one side siliconcoated

Typical physical values

Raw material	1904080
Material	Polyester
Temperature resistance (glued on aluminium)	-40° C to +150° C no visible changes
Dimensional stability (tested acc. DIN 30646)	classification number 02 (shrinkage < 0,2%)
Dielectric strength (VDE 0303, T2)	min. value: 82,2 kV/mm average value: 84,1 kV/mm
Fire behaviour when glued	self-extinguishing after 15 seconds, no dripping
Opacity	covers the contrasting colors of the surface well
Salt spray (DIN 50021 SS)	150 h no complaints
Fungus	fungus resistant, not fungus supporting
Substrate corrosion	causes no corrosion on the glued surface

Adhesive	acrylic based self-adhesive, suitable for polyethylene and polypropylene
Adhesive type (DIN 30646)	permanent, low temperature, special adhesive
Min. service temp.	+4° C

Functioning / Durability

According to present knowledge the following functioning and durability of PET white glossy can be expected. Usually not during the following times with vertical outdoor weathering, if the foils have been processed and glued according to recommendations:

Durability	outside use: 2 to 3 years inside use: almost unlimited
Shelf life	12 months
Recommended storage condition	23° C / 50% relative humidity. Storage of the foil rolls/label rolls in polybags is recommended.

Processing

Printing	Silk screen printing/letterpress printing/flexographic printing/offset printing Before series production a color qualification test is recommended. Note: It is recommended to test the base pressure also for chemical resistance, if necessary!
Thermal transfer printing	The special surface coating of PET white glossy is very well suited for the lettering in the thermal transfer procedure. The visual appearance and the capacity of lettering depend on the used ribbon. To achieve a perfect printout the print speed and the transfer temperature of the heat bar are to be varied, if necessary.
Pressing	Sharp knives and a minimal web tension is recommended in order to avoid a possible adhesive bleed.

Adhesion (N/10 mm)

Aluminium	5.6
Stainless steel	5.6
Polycarbonate	5.4
Phenolic resin	5.5
ABS	5.3
Polystyrene	5.1
Polypropylene	4.7
HD-Polyethylene	3.6
LD-Polyethylene	3.4
Smooth powder coating	5.2

Measured according to Finat test method FTM 2 after 72 h storage at 70 °C. The indicated adhesive values are average values. They are not suitable for specifications.

Resistance to climatic demands

SFW 0,2 S DIN 50018

Demand 2 cycles: no change

Foil glued to stainless steel, tested for 72 h storage in standard climat 23/50, DIN 50014.

Resistance to chemical and solvent

The foils are resistant to most mineral oils and greases, fuels, aliphatic solvents, weak acids, salts and alkalis such as:

Agent	Time	Result
Heptane	4 h	No complaints
Petroleum	4 h	No complaints
Diesel	4 h	No complaints
Engine oil SAE 15W40	4 h	No complaints
Brake fluid DOT 4	4 h	No complaints
Windscreen cleaners	4 h	No complaints
IPA	4 h	No complaints
Toluene	4 h	No complaints
Industrial cleaner (lemon)	4 h	No complaints
Pril	4 h	No complaints
Acid (PH4)	4 h	No complaints
Lye (PH 10)	4 h	No complaints

Foil glued to stainless steel, tested after 72 h storage in standard climat 23/50, DIN 50014.

Disclaimer

The performance of the product should always be tested in the actual application conditions. Our recommendations are based on our most current knowledge and experience. As our products are used in conditions beyond our control, we cannot assume any liability for damage caused through their use. Users of our products are solely responsible that the product is suitable for its intended application, and have determined such at their sole discretion. Users must comply with any applicable legislation and/or testing requirements for the finished article, and are responsible for bringing their products to market.

This publication does not constitute any warranty, express or implied, and is intended only for the recipient and cannot therefore be transferred to any third party. We cannot assume any liability for the use of our products in conjunction with other materials.

All our products are sold subject to Carl Valentin's general sales conditions, and you should ensure that any existing laws are observed.

This publication replaces all previous versions. All information is subject to change without notice.



Carl Valentin GmbH
Neckarstraße 78 – 86 u. 94
78056 Villingen-Schwenningen
Phone + 49 7720 9712-0
info@carl-valentin.de
www.carl-valentin.de

