

Product Information

Laser-Label series toptack COLOR LASER FOLIE



Status: 05.05.2022

Material No.: 5xx8xxxx / tCLF

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General description:

The labels are made of polymer film. The surface color is silver-white, satin. The labels are designed for emission-free inscription using a laser. The special surface of the film also allows (customer-side) printing. The laser inscription is based on a color change reaction and takes place underneath a cover laminate. The color of the inscription with the laser is dark. One side of the film is equipped with a permanent *pressure-sensitive adhesive (*depending on the surface condition (roughness), different adhesive thicknesses are available).

Physical properties:

Label material	130 µm Polymer foil, Polyester based
Pressure-sensitive adhesive	25 µm Acrylate adhesive, modified (*35µm /*75µm Option)
Backing	55 µm Paper, non-stick coated on one-/or *both sides

Special properties:

- Very high adhesion even on low-energy and *structured surfaces.
- High temperature resistance
- Extremely high durability of the laser image under the cover laminate.
- Very good resistance to external loads.
- Emission-free marking with fiber laser or Nd-YAG laser.

Features:

Temperature resistance	- 40° C up to +140° C (much higher for short time)
Minimum bonding temperature	+10° C
Roughness of the adhesive surface	* up to RZ25
Resistant to motor oil, petrol, diesel and brake fluid	
Resistant to much chemical loads	

Measured pull-off forces based on FINAT FTM1 from the mentioned reference surfaces:

Polypropylene: 35N / 25mm

Stainless Steel: 39N / 25mm

Special notes:

The surface of the substrate must be clean and dry and at least +10°C when gluing the material.

To mark the material, use Nd-YAG laser or alternatives that operate in the same wavelength range of 1,064nm. (Parameters for inscribing the labels, using the example of a 20W fiber laser from Co.CAB: Laser power 40%, frequency 40 kHz, speed 2,500 mm/s).

The material conforms to current RoHS and REACH regulations. IMDS data of the label material is available on request.

Storage conditions:

Storage up to approx. 12 months at a maximum ambient temperature of +21°C and 50% humidity. We refer to the relevant guidelines for the storage of self-adhesive materials from the FINAT association and its recommendations (available on request). Avoid especially changing temperatures and changing humidity during storage.

Legal notice:

This material information is intended to advise you. Information has been compiled to the best of our knowledge. However, no rights can be derived from the information provided and no claims can be derived from it. Only your own tests can provide information about the suitability.