Product Information

Laser-Label Series toptack LASER FOIL

Created on October/15/2021

Material Nr.: 5xx8xxxx

General description:

The label material consists of polymer film. The surface color is glossy black. The material is designed for marking with a laser. It is also possible to cut the material with the laser beam. The surface of the film also enables printing using the thermal transfer printing process. Laser marking is based on a removal process. The top layer of the foil is removed by the laser. The inscription then appears white due to the marking with the laser. The film is equipped with a permanent *pressure sensitive adhesive on one side.

Physical properties:

Label material	50 µm Polymer foil Polyester based
*pressure sensitive adhesive	25 µm Acrylic modified (*35µm / *75µm as an option)
Liner material	55 µm Glassine paper non-stick coated on one or both sides

Special Features:

- Good adhesion even on low-energy surfaces
- High temperature resistance
- High durability of the typeface by laser engraving
- Good resistance to external loads
- Marking with CO_2, fiber laser or Nd-YAG laser

Features:

Temperature resistance	- 40° C bis + 140° C (briefly also higher)
Minimum bonding temperature	+10° C
* Roughness of the adhesive surface	RZ10 (* up to RZ35)
Resistant to many chemicals and oils	

Measured pull-off forces based on FINAT FTM1 from the mentioned reference surfaces:
Polypropylene: 25N / 25mm
Stainless Steel: 29N / 25mm

IMPORTANT NOTE:

➔ Harmful vapors and fine dust are produced during the laser burn-off process.
➔ It is therefore imperative to use suitable filter or extraction systems. We would be happy to advise you.

Special Notes:
The surface of the substrate must be clean and dry and at least +10°C when gluing the material. Use CO2, Nd-YAG lasers or fiber lasers suitable for ablating material to mark the material. (Parameters: Using a 20W fiber laser as an example, for writing on the label: 60% laser power, frequency: 30 KHz, speed: 2000 mm/sec.). Label material IMDS data available on request. 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 +20°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 upon request). Avoid changing moisture and changing temperatures while storage the material.

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 of the material.