



Laser Edged Thermoplastic Labels

Labels (or tags) made of injection-molded thermoplastic, indelibly marked by laser engraving. Application in hostile environment, particularly outdoor exposure, extreme humidity and moderately aggressive chemicals and high temperatures. Economic solution for many small quantity applications, provided existing tooling and tested thermoplastic material is suitable for intended use.

Material	Several thermoplastic materials lend themselves for laser engraving. Dark materials will turn light, bright materials will turn dark. Choose the material according to the application
Sizes	Any size and shape, with or without rivet holes, which can be injection molded. Some standard sizes available (existing tools)
Symbology and Layout	Any standard symbology in any layout. NBW preferably not less than 0,4 mm
Application	Mechanically (screws, rivets, wires, frames etc.) or by means of a suitable adhesive
Temperature resistance	Depends on the actual thermoplastic material used. Repeated exposure for several hours at a time to a temperature of 80 - 90 °C over a period of several years will show no adverse effect
Mechanical resistance	Thermoplastic labels are flexible, shock-proof and scratch-resistant even at low temperatures
Chemical resistance	Generally speaking, thermoplastic labels are resistant to water, dilute acids and alkalis, and to aqueous solutions of salt. They are resistant to paraffins such as pentane, hexane and heptane in the absence of stress. Thermoplastic labels are not resistant to concentrated inorganic acids, aromatic and chlorinated hydrocarbons, esters, ethers and ketones. They are soluble in methyl ethyl ketone, tetrahydrofuran, toluene and dimethylformamide. The resistance to chemicals normally decreases as temperature increases
Remarks	Using state-of-the-art scanners, excellent first-read-rates are obtained despite certain limitations in edge definition and print contrast of the image. In view of the many factors that may affect the performance of these products, comprehensive tests must be carried out in order to establish their suitability for a given application. The above information is subject to periodic review and up-date

