

# tesa® 6947 Laser-Label

High-Speed markable and fraud-resistant

## PRODUCT INFORMATION

### Product Description

tesa® 6947 is a double layer, brittle acrylic film with watermark. Customized and fraud-resistant information, such as company logo, is permanently embedded in the backing. Marking and cutting are achieved by laser in one step, which makes it possible to realize any desirable label variation and format using only one material. The backing is highly resistant against chemicals, abrasion, temperature and ageing. The adhesive system consists of a resin modified acrylic suitable even for low energy surfaces.

This high performance product is used as a tamper evident identification label over the entire lifetime of a product and also as a data carrier system for intelligent in-process steering.

The use of a high-speed laser enables a considerably quick marking up to 4000mm/ sec.

Available in: black

### Main Application

- Customized Watermark embedded in the backing
- Very fast marking is achieved in conjunction with high-speed laser hardware
- High contrast and excellent marking precision
- Very resistant to heat, abrasion and chemicals
- Tamper Evident: Manipulation leaves visible trace
- Not removeable without destruction of the label
- Flexible formatting and label design: marking and cutting by the laser
- Efficient: Replaces a multitude of pre-made labels
- Just-in-time production reduces storage needs

### Technical Data

■ Backing material	acrylic	■ Adhesion to Steel >	1.8 N/cm
■ Tamper Evidence	yes	■ Type of liner	coated paper
■ Peel off force from liner	2-10 cN/cm	■ Weight of liner	120 g/m <sup>2</sup>
■ Type of adhesive	acrylic		

### Properties

■ Printability	+	■ Humidity resistance	++
■ Temperature resistance short term	270 °C	■ Resistance to chemicals	++
■ Temperature resistance long term	120 °C	■ Suitable Laser	CO <sub>2</sub> , Nd:YAG, Yb:YAG
■ Ageing resistance (UV)	++	■ Storage conditions	23°C, 50% RH, stored in original box
■ Frost resistance	-50 °C		

Evaluation across relevant tesa® assortment: ++ very good, + good, o medium, - low

For latest information on this product please visit <http://l.tesa.com/?ip=06947>

Page 1 of 2 / As of 07/04/14

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tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. Therefore, the user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical support staff will be glad to advise you.

### Additional Info

Dimensions: Customer specific  
Standard Width: 100mm or 120mm. Length: 170-300m  
(Length 6947 PV6: max. 200m)

#### Assortment and Technical Data:

6947 PV3 black/ white glossy: Adhesive 25g/m<sup>2</sup>, Thickness 100µm without Liner. Color code: 04

6947 PV3 black/ white matte: Adhesive 25g/m<sup>2</sup>, Thickness 100µm without Liner. Color code: 28

6947 PV6 black/ white glossy: Adhesive 35g/m<sup>2</sup>, Thickness 140µm without Liner. Color code: 04

6947 PV6 black/ white matte: Adhesive 35g/m<sup>2</sup>, Thickness 140µm without Liner. Color code: 28

#### Optional: UV-Footprint adhesive (MU48 or MU49):

tesa® 6947 MU48/MU49 is equipped with a special acrylic adhesive system containing fluorescence, which penetrates into the substrate leaving an UV-detectable trace ("UV-Footprint"). This special variant is available upon request.

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Page 2 of 2 / As of 07/04/14

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