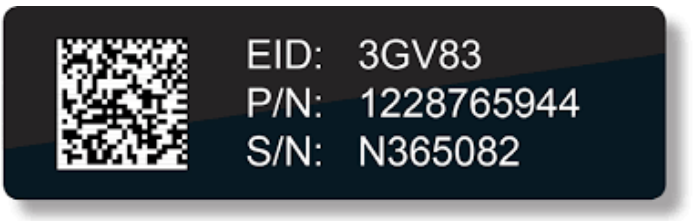

Polyacrylic Labels - Tesa® 6973 PV6

IUID PRODUCT LINE

Tesa® 6973 PV6 label stock is a flexible, durable and economical 2-layer polyacrylic film designed for producing laser cut and etched linear and IUID 2D Data Matrix labels. Offering excellent adhesion to LSE plastics, Tesa® 6973 PV6 is a proven, MIL-STD-130 compliant label stock you can rely on for outstanding long-term performance in multiple marking applications.

The black top layer is bonded to a white base layer to form a strong homogeneous unit. A modified acrylic adhesive provides excellent grip, even on low-energy surfaces such as polypropylene.

Material and Design Specifications

- Material: Cast Modified Acrylate - 0.0044" (0.11 mm) thick
- Laser-beam marked print method
- Product Form: Continuous die cut labels on rolls or cut to a specified sheet size
- Shelf Life - Maximum storage period of 1 year under normal room conditions

Adhesion*

- Steel - 30 N/25 mm
- Aluminum - 30 N/25 mm
- Polypropylene - 10 N/25 mm
- Polyethylene - 25 N/25 mm
- Polycarbonate - 14 N/25 mm
- ABS - 28 N/25 mm
- PVC - 28 N/25 mm

*Due to the brittle nature of the material, adhesion can only be measured indirectly. In some cases, the adhesion depends on the nature of the surface. The indicated adhesive values are for orientation only and intended as application aids.

*N/mm means that a force of that many newtons was developed across a sample that many mm wide during a peel test.

Key Features

The cast modified polyacrylate facestock has a matte surface that can be marked with a CO_2 or YaG laser, and is available in custom sizes and shapes. Here's what you get:

- Long-term durability
- Excellent abrasion, temperature, chemical and environmental resistance
- High-resolution, high-contrast label images
- Good printability and excellent barcode readability
- Permanent adhesion to LSE plastics, oily metals, powder coatings and textured surfaces

Industries and Applications

- Tesa® 6973 PV6 produces labels with IUID 2D Data Matrix symbologies successfully used by the military as well as general industry. In some applications, it is suitable for tamper-evident identification.

Industrial
- Automotive
- Consumer Goods
- Converter Solutions
- Electronics
- Medical
- Packaging
- Specialty Vehicle

Military
- Engine Compartments
- Fuel Transport Modules
- Marine
- Military Vehicles
- Outdoor Equipment
- Small Arms
- Weapons Systems

Environmental Specifications

- Operating Temperature Range: -58° F to +392° F (-58 to +200° C)
- Chemical Resistance: Excellent resistance to water, oil, humidity and caustics/acids.
- UV Resistance: Up to 5 years
- Climatic and Weather Resistance: Climatic resistance according to DIN 5007 SWF and DIN 5006 SWF 2.0S - no change. Weather resistance according to DIN 53387, 2000 hours, corresponding to approx. 4-5 years - no change.
- Salt Spray Resistance: SS DIN 50021, 240 hrs, 5% concentration, 35° C (95° F) - no change

Test Results

These tests were conducted for a limited period in strict laboratory conditions. To achieve maximum satisfaction, we highly recommend any customer considering use of this product test the labels in the environment in which they will be used.

Resistance to Chemicals and Solvents: Samples applied to glass panels, allowed to wet out for 72+ hours, immersed in chemicals below. Ambient room temperature conditions											
Sample (Immersion Time)	Water	Salt Water	Bathroom Cleaner	Glass Cleaner	Isopropanol 99%	Brake Fluid DOT 3	Acetone	Diesel Fuel	Nitric Acid	Hydrochloric Acid	Sodium Hydroxide
Tesa 6973-PV6 (2 hours)	NE	NE	NE	NE	AO/ER	NE	TW	AO/ER	NE	NE	NE
Tesa 6973-PV6 (24 hours)	NE	NE	NE	NE	TW, AO	AO/ER	TW	AO/ER	NE	NE	NE
Tesa 6973-PV6 (48 hours)	NE	NE	NE	AL	TW, AO	AO/ER	TW	AO/ER	NE	NE	NE
Key: NE = No Effect, AO = Adhesive Ooze, AL = Loss of Adhesion to Glass Panel, TD = Tag Delaminated, PE = Print Erosion Under Laminate, ER = Adhesive Edge Erosion, TW = Tag Wrinkled											

Resistance to Extreme Temperatures:		
Temperature	-40° F (-40° C)	450° F (232.2° C)
Exposure Period	24 Hours	1 Hour (Max Temp. Exposure)
Change	NE	NE
Key: NE = No Effect		

Abrasion Resistance		
Test	Strokes	Result
Crockmeter	200	NE
Taber/Abraser: CS-10 abrading wheels, 500 gram per wheel load	1,300	NE
Key: NE = No Effect		

Environmental Performance	Conditions	Result
Weather Resistance	DIN 53387, 2000 hours corresponding to approx. 4-5 years	NE
Climatic Resistance	DIN 5007 SWF and DIN 5006 SWF 2.0S	NE
Salt Spray Resistance	SS DIN 5002, 240 hrs, 5% concentration, 95° F (35° C)	NE
Key	NE = No Effect	

*All technical information and recommendations are believed to be accurate but do not guarantee or warranty. Suitability is the responsibility of the user.

Installation Instructions

1. Clean the surface using Isopropyl alcohol, alcohol pad or equivalent solvent to ensure surface is free from dirt, dust, oil and misc. debris that may affect adhesion.
2. Handle the tag by edges, peel release liner from back ensuring not to touch the adhesive.
3. Place the tag in desired tagging location and firmly apply even pressure to the tag for 5 seconds.
4. Do not disturb the newly mounted tag for at least 72 hours to ensure proper adhesive sealing.