Test Report

tape:

tesa LaserLabel 6973 PV3/PV6 (color black/white – special security product)
(including information: characters, barcodes)

substrate: steel

Overview of test methods:

Environmental Exposure	Test	Result
Outdoor-weathering test		
Xenontest	2.000 hours	no changes
Florida test	15 month	no changes
Kalahari test	15 month	no changes
Arizona test	15 month	no changes
Humid conditions	+50°C/95% rel. humidity-20 days	no changes
Sun simulation	15 cycles humidity/15 cycles dry (4 weeks)	no changes
Xenon (UV) Test	3.000 hours (equal to 3-4 years outdoor-weathering)	no changes
Xenon (UV) Test – long term	10.000 hours	no changes
Ultraviolet Light and Water (Wheatherometer)	720 hours / 20 min. UV and 3 min. UV&water	no changes
Heat aging (short term)	90°C circulating air/20 weeks	no changes
Heat aging (short term)	180°C circulating air/19 days	no changes
Heat and Cooling cycles (long term)	150°C and – 40°C (5.000 hours)	no changes
Low temperature	- 30°C / 7 days	no changes

Corrosion long-term test EK4	18 weeks	no influence
Galvanostatic Cathodic Polarization of Coated Panels Electrochemical Corrosion Shorttime Test	5 days	no changes
Shrinkage	240 hours / 23° C and 98% rel. humidity	< 0.05 %
Shrinkage	180°C / 7 days	< 0.1 %
Shrinkage	270°C / 15 min.	< 0.2 %
Condensation water climatic testing		
water climate testing	20 weeks / 23 °C 98% rel. humidity	no changes
water climate testing	20 weeks / 45 °C 98% rel. humidity	no changes
Mechanical testing		
Crockmeter (dry)	2.000	no changes
Crockmeter (with super petrol)	1.000	no changes
Taber Test (10N / dry)	500 strokes	no changes
Chemical resistance testing		
Water immersion	48 hours / 70°C	none
Super petrol	1 hour / 23 °C	none
Sulfuric acid (30%)	1 hour / 23 °C	none
Sodium Hydrooxide (1%)	1 hour / 23 °C	none
Toluol	1 hour / 23 °C	none
Motor oil (SAE 20 S)	1 hour / 23 °C	none
Preservative (Wax Henkel)	1 hour / 23 °C	none
Washer Detergent	48 hours / 65°C	none
Dishwater Detergent	48 hours / 23°C	none

Detergent for inside (Sidolin)	1 hour / 23 °C	none
Lubricating Oil	48 hours / 23 °C	none
Cooking Oil	48 hours / 23°C	none
Gasoline Splashing (immersed in gas athmosphere)	1 hour / 23 °C	none
high-pressure cleaner	50 bar, 45° angle to substrate, 1m distance, 40° temperature for 10 minutes substrate: lacquer panel, polypropylene	none
Hot engine oil	120 °C / 4 hours	no changes
Hot engine coolant (50:50: ethylglycol&water)	95°C / 4 hours	no changes
Brake Fluid (DOT 3 or DOT 4)	23 °C / 4 hours	no changes
Other		
flammable test	US 571.302	no flammable

Laser-Label Certifications / Specifications

Institution/Cert-No. Address	tesa Label	is certified on (date)

UL MH 18055 (M)

Underwriters Laboratories 1285 Walt Whitman Road Melville, New York 11747-3081 USA	(6930)	13.09.94, revised 15.3.99

BWB Normentwurf VG 95 530

Bundesamt für Wehrtechnik und Beschaffung Postfach 7360 Konrad-Adenauer-Ufer 2-6 Koblenz	(6930)	Sept.1986

KBA Fabrikschild i.S. der StVO

Kraftfahrt-Bundesamt 24932 Flensburg	(6930)	10.01.1995

Natec NATEC Institut GmbH Behringstr. 154 22763 Hamburg	(6931) Methode DINV ENV 1186 Grenzwert nach §8 Bedarfsgegenstände eingeh.	06.11.1996

CSA C22.2 No. 015-95 Part II	(6930/6931)	12.02.1996
Canadian Standards Association 178 Rexdale Boulevard Etobicoke Ontario Canada M9W 1R3		
DB DBL 8230	(6930)	
Daimler Benz		
VW TL 52038 C	(6930) Freigabe auf lackierter	16.08.1993
Volkswagen AG Forschung & Entwicklung Wolfsburg	Oberfläche	(Abschlußbericht)
Opel GME 00 008-A1	(6930)	
Opel Technical Development Centre Europe		
BMW N 60045.0	(6930)	13.06.1997
BMW AG Sparte Labor Postfach 1120 84130 Dingolfing		