



ELASTODUR GLOSS

manufactured in Japan by **KIMOTO Co., LTD**

technical data sheet

DESCRIPTION	APPLICATION	FEATURES
PET film for graphic overlay (Cover) with anti scratch treatment on the top side	Developed as an overlay for the production of flexible switches and membrane keyboards	<ul style="list-style-type: none"> • Good dimensional stability • Optimal flatness • Embossable • Gloss finish • One side scratch resistant • One side treated for screen printing and UV inkjet inks
<p>ANTI-SCRATCH SIDE</p> <p>PRINTABLE SIDE</p>	<p><i>Suggested inks: Marabu MSW 171, MSW 180, MSW, MSW 932, MSW 980, MSW 981, UVSW 170, UVSW 180, UVSW 932, UVSW 980</i></p> <p>PRINTABLE SIDE IS PROTECTED WITH A LINER</p>	

PHYSICAL AND MECHANICAL PROPERTIES

Property	Test method	Unit	Nominal values	
Nominal thickness	ASTM D 1186	micron	125	188
Total thickness	ASTM D 374	micron	130 (±10 %)	193 (±10 %)
Tensile strength	<i>Machine Direction</i> ASTM D 882	daN/mm ²	16.5	18.6
Elongation at break	<i>Machine Direction</i> ASTM D 882	%	131.2	93.4
Tape adhesive	ASTM 3002	/100	100	
Film hardness by pencil test	ASTM D3363	-	> 2H	
Switch life	300g; 10,000times/1hr	million flexes	> 5	

CHEMICAL PROPERTIES

Property	Test method	Unit	Nominal values
Chemical resistance	DIN 42115	-	Resistant to: Alcohols Dilute Acids Dilute Alkalis Esters Hydrocarbons Ketones Household Cleaning agents
Moisture vapour transmission rate (MVTR)	RTM 607	g/m in 24 hours	2.6
Oxygen transmission rate	RTM 608	ml/m in 24 hours	5.3

The foregoing information and any consulting provided by us in terms of application engineering shall be given to our best knowledge, but shall not be considered binding information neither with regard to any third party industrial property rights. Any such consulting shall not relieve you from your own review of our current consulting information as to their suitability for the intended procedures and applications. It is the users responsibility to determine the suitability for his/her own use and application and test through the complete production process to ensure the product is fully suitable for the intended use, since conditions of use are beyond our control. The sale of our products shall be subject to our current General Terms and Conditions. We reserve the right to make changes that serve to improve the product.

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THERMAL PROPERTIES

Property		Test method	Unit	Nominal values	
Coefficient of thermal expansion	Machine Direction	ASTM E794-85	cm/cm/°C	19 x 10 ⁻⁶	
	Cross Direction			16 x 10 ⁻⁶	
Shrinkage at 120°/30'	Machine Direction	ASTM D1204	%	< 0.2	
	Cross Direction			< 0.1	
Maximum and minimum long term use		Kimoto method	°C	-40 - 85	

ELECTRICAL PROPERTIES

Property		Test method	Unit	Nominal values	
Volume resistivity		ASTM D257 and D2305 @ 25 °C	Ω/m	10 ¹⁸	
Surface resistivity	20°C / 50% H.R.	JIS-K-6911	Ω/cm	3.4 x 10 ¹³	
Dissipation factor		ASTM D150 @ 1kHz, 25 °C	-	0.005	
Dielectric strength		ASTM D149 1/4" electrode 500V/sec in 25C dry air	kV	18	22

OPTICAL PROPERTIES

Property		Test method	Unit	Nominal values	
Total transmission		ASTM D1003	%	≥ 90	
Haze		ASTM D1003	%	< 1	
Glossness	Angle test 60°	ASTM D523	%	≥ 150	
Yellowness index		ASTM D2244	-	< 2	

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