

Soft-STAT® - TPU/ABS

New investments on thick gage vacuum forming technology enable Eurostat to provide a truly conductive solution composed of a sheet of conductive ABS and an abrasion resistant conductive TPS layer on top.

For heavy duty and surface sensitive products, conductive ABS/TPU is a unique advanced material.

TPU
ABS

Product Specifications

Colour:	Black
Standard thicknesses:	3mm and 4mm
	Other thickness gauge available upon project definition

Electrical Properties

	Test standard	Results
Surface resistance Rs	IEC 61340-5-1	$R_s < 5 \times 10^5 \Omega$
Volume Resistance Rv	IEC 61340-2-3	$R_v < 5 \times 10^7 \Omega$
Static Decay Time Dt	IEC 61340-5-1	+1000V / +100V = 0.1 sec
	IEC 61340-2-1	-1000V / -100V = 0.1 sec

Material Properties (for a 4mm thickness sheet)

	Test Method	Unit	Values
Density	ISO 1183-1	g/cm ³	1.10 - 1.12
Yield stress	ISO 527-2	N/mm ² (MPa)	32
Yield strain	ISO 527-2	%	3.0
Tensile modulus	ISO 527-2	N/mm ² (MPa)	1550
Flexural strength	ISO 178	N/mm ² (MPa)	39
Charpy impact strength 23°C	ISO 179/1eU	kJ/m ²	50
Charpy impact strength -30°C	ISO 179/1eU	kJ/m ²	21
Charpy notched impact strength 23°C	ISO 179/1eA	kJ/m ²	6
Charpy notched impact strength -30°C	ISO 179/1eA	kJ/m ²	2.5
Vicat softening temperature (VST/B/50)	ISO 306	°C	78

Other properties

	Test Method	Unit	Values
Moulding shrinkage		%	0.6 - 0.9
Coefficient of linear thermal expansion		1/K	8 - 11*10 ⁻⁵
Flammability according UL (based on raw material indications (natural, 1.60mm))	UI94	class	HB
Spec. surface resistance	IEC 60093	Ohm	10 ⁴ - 10 ⁶

All details have been examined on a pigmented, extruded sheet at 23°C (if the product definition doesn't state otherwise) and do not represent limits for productions to come. Divergences, resulting from tolerances caused during processing and different colouring, cannot be quantified.