Hagedorn Plastirol
part of PAG

Osstyrol L-ABS/L-TPU

HP-PM revision: 02/21

Description

Sheets, produced from conductive ABS with a percentage of TPU with a coextruded, conductive TPU-layer.

Product information	Test method	Unit	L-TPU	L-ABS
Mechanical properties				
Yield stress (1)	ISO 527	MPa	19	
Tensile strain at yield (1)	ISO 527	%	24	
Elongation at break (1)	ISO 527	%	730	
Tensile modulus	ISO 527	MPa	250	1790
Flexural strength	ISO 178	MPa		
Charpy impact strength 23°C / -30°C (2)	ISO 179/2C	kJ/m²	NB	
Charpy notched impact strength 23°C / -30°C (2)	ISO 179/2C	kJ/m²	NB	
Izod notched impact strength 23°C	ISO 180/1A	kJ/m²		16
Shora A hardness	DIN 53505	Shore A ca.-value	85	
Thermal properties				
Vicat softening point VST/B/50	ISO 306	°C		
Vicat point VST/A/120	ISO 306	°C		99
Deflection temperature 1.8 Mpa (HDT A)	ISO 75-2	°C		
Deflection temperature 0.45 Mpa (HDT B)	ISO 75-2	°C		
Electrical properties				
Realtive permittivity at 100Hz / 1MHz	IEC 60250			
Dissipation factor at 100 Hz / 1MHz	IEC 60250	Ohm cm		
Surface resistivity, top-side	DIN 61340	Ohm	< 10E6	< 10E6
Volume resistivity	DIN 61340	Ohm cm	< 10E6	< 10E6
Electric strength K20/P50	IEC 60243-1	kV/mm		
Optical properties				
Surface gloss	DIN 67530	%		
Flammability				
Flammability UL-Standard at thickness d=1.6 mm	UL 94	Class		
Testing of electrical insulating material, Method FH	IEC 60707	Level		
Testing of electrical insulating material, Method BH	IEC 60707	Level		
Testing of car industry's materials (d>1mm)	FMVSS 302			
Other properties				
Density at 23 °C	ISO 1183	g/cm³	1,23	1,04 - 1,05
Abrasion	DIN 53516	mm^2 ca.-value		

Particularities

Important: The given values apply to the product condition upon delivery at customer. In particular, the conductivity is affected by storing conditions and storing duration as well as the kind of further processing. Depending on individual parameters (elongation ratio, residual wall thickness, temperatures) deep drawig influences the conductivity to different extents and under extreme conditions, may lead to decomposition of conductivity. Measurement of conductivity is according to DIN 61.340-2-3.

(1) Sample: 400 µm thickness

(2) Sample: 4,00 mm thickness

NB: no break

Note