

METZO[®] PLAST ABS/N

Brief characteristic:

Impact acrylonitrile butadiene styrene copolymer with good thermoforming properties.

Mechanical properties

Yield strength	ISO 527	MPa	45
Elongation at yield	ISO 527	%	2,7
Tensile strength at break	ISO 527	MPa	
Elongation at break	ISO 527	%	
Modulus of elasticity	ISO 527	MPa	2200
Flexural stress at conventional deflection	DIN 53452	N/mm ²	
Impact strength at 23°C	EN ISO 179/1eU	kJ/m ²	without break
Impact strength notched at 23°C	EN ISO 179/1eA	kJ/m ²	18
Shore hardness	DIN 53505	D	

Thermal properties

Vicat softening point VST B 120	ISO 306	°C	101
ISO/R75 process A	ISO 75	°C	97
ISO/R75 process B	ISO 75	°C	
Continuous working temperature		°C	(1)
Thermal coefficient of linear expansion	ISO 7991	10 ⁻⁵ /K	~ 9
Thermal conductivity	ISO 8302	W/Km	
Specific heat		kJ/kgK	

Electrical properties

Dielectric constant (1 MHz)	IEC 250		
Dissipation factor (1MHz)	IEC 250	10 ⁻⁴	
Specific volume resistivity	DIN EN 61340-5-1	Ω cm	> 10 ¹⁵
Surface resistivity	DIN EN 61340-5-1	Ω	> 10 ¹⁴
Dielectric strength	VDE 0303	kV/mm	
Resistance of tracking	DIN 53480	level	

Other properties

Shrinkage (2)		%	0,4 – 0,7
Water absorption	ISO 62	%	0,3
Density	ISO 1183	g/cm ³	1,06

- (1) The continuous working temperature of this formulation depends on many different external factors like place of installation, environmental effects like chemicals etc..
- (2) The shrinkage behaviour depends also on the thermoforming process, design and final wall thickness distribution of the final product, mould temperature, material being used to build the mould and draw ratio etc. We recommend to do tests when constructing the mould

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