

Terlux HD 2812

Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS)

TECHNICAL DATASHEET

DESCRIPTION

Terlux® HD 2812 is an easy-flowing injection molding grade based on a MABS polymer. Terlux® HD 2812 offers an unique combination of properties, such as a balanced stiffness/toughness ratio and the high transparency well known in SAN molding compositions.

FEATURES

- Excellent transparency
- Good resistance to chemicals
- Good Stiffness and surface finish
- High impact strength
- HD service package available
- Easy-flow grade

APPLICATIONS

- Medical devices

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	8
Melt Volume Rate, 220 °C/21.6 kg	ISO 1133	cm³/10 min	45
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	5
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m²	2
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	110
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m²	70
Tensile Stress at Yield, 23 °C	ISO 527	MPa	42
Tensile Strain at Yield, 23 °C	ISO 527	%	4
Tensile Modulus	ISO 527	MPa	1900
Nominal Strain at Break, 23 °C	ISO 527	%	20
Flexural Strength, 23 °C	ISO 178	MPa	60
Hardness, Ball Indentation	ISO 2039-1	MPa	75
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	87

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Property, Test Condition	Standard	Unit	Values
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	87
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	93
Coefficient of Linear Thermal Expansion	ISO 11359	10 ⁻⁶ /°C	80 - 110
Thermal Conductivity	DIN 52612-1	W/(m K)	0.17
Electrical Properties			
Dielectric Constant (100 Hz)	IEC 62631-2-1	-	3
Dissipation Factor (100 Hz)	IEC 62631-2-1	10 ⁻⁴	160
Dissipation Factor (1 MHz)	IEC 62631-2-1	10 ⁻⁴	130
Volume Resistivity	IEC 62631-3-1	Ohm*m	10 ¹⁴
Surface Resistivity	IEC 62631-3-1	Ohm	10 ¹⁵
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.54
Other Properties			
Density	ISO 1183	kg/m ³	1080
Water Absorption, Saturated at 23 °C	ISO 62	%	0.7
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.7
Melt Temperature Range	ISO 294	°C	230 - 260
Mold Temperature Range	ISO 294	°C	50 - 75
Injection Velocity	ISO 294	mm/s	200
Drying Temperature	-	°C	70
Drying Time	-	h	2