

Terlux HD 2802

Methyl Methacrylate Acrylonitrile Butadiene Styrene (MABS)

TECHNICAL DATASHEET

DESCRIPTION

Terlux® HD 2802 is a standard injection molding grade based on a MABS polymer. Terlux® HD 2802 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

APPLICATIONS

- Medical devices

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	2
Melt Volume Rate, 220 °C/21.6 kg	ISO 1133	cm³/10 min	17
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	120
Charpy Unnotched, -30 °C	ISO 179/1eU	kJ/m²	80
Tensile Stress at Yield, 23 °C	ISO 527	MPa	48
Tensile Strain at Yield, 23 °C	ISO 527	%	4
Tensile Modulus	ISO 527	MPa	2000
Tensile Creep Modulus (1000h)	ISO 899	MPa	1250
Nominal Strain at Break, 23 °C	ISO 527	%	12
Flexural Strength, 23 °C	ISO 178	MPa	70
Hardness, Ball Indentation	ISO 2039-1	MPa	70
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	93

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Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	105
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	90
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	94
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	-	2.9
Dissipation Factor (100 Hz)	IEC 62631-2-1	10 ⁻⁴	160
Dissipation Factor (1 MHz)	IEC 62631-2-1	10 ⁻⁴	140
Volume Resistivity	IEC 62631-3-1	Ohm*m	>10 ¹³
Surface Resistivity	IEC 62631-3-1	Ohm	>10 ¹⁵
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.54
Haze	ASTM D 1003	%	< 3
Light Transmission at 550 nm	ASTM D 1003	%	89
Other Properties			
Density	ISO 1183	kg/m ³	1080
Bulk Density (with external lubricant)	-	kg/m ³	590
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

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Typical values for uncolored products

Please note that all processing data stated are only indicative and may vary depending on the individual processing complexities.

Please consult our local sales or technical representatives for details.

SUPPLY FORM

INEOS Styrolution Terlux resins are available in 25kg bags, Big bags or octabin cartons. The bulk density is from about 0.55-0.65 g/cm³. Terlux pellets can be stored for prolonged periods in dry areas subject to normal temperature control without any changes in mechanical properties. Avoid direct exposure to sunlight. However, for sensitive colors storage over some years can cause some color change. Under poor storage conditions, Terlux absorbs moisture, which can be removed again by drying. Packs stored in cold areas should be brought to ambient temperature before opening, to prevent condensation on the pellets.

PROCESSING

Terlux is primarily processed through injection molding but any process suitable for thermoplastic molding compositions may also be used.

DISCLAIMER

The above mentioned data are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its processability. INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.