INEOS STYROLUTION

Zylar 650

Methyl Methacrylate Butadiene Styrene (MBS)

TECHNICAL DATASHEET

DESCRIPTION

The product line Zylar® comprises blends from styrene, butadiene and methylmethacrylate copolymers (MBS). The blends are highly transparent, tough and show a good chemical resistance. Depending on the application, they can be a low density alternative for polycarbonate, PET-G or transparent ABS (MABS). The grades are suitable for medical applications, food contact statements are available upon request. Zylar®650 provides a good balance between transparency and toughness and is also available with UV package.

FEATURES

- Balanced properties
- High flowability
- Sterilisable(ETO,NO2,Irradiation)
- Toughness
- Low density

APPLICATIONS

- Household applications
- Food contact applications
- Medical devices
- Medical diagnostic equipment
- Toys, sports & leisure

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm³/10 min	4
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	45
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	2
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	25
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	3
Tensile Modulus	ISO 527	MPa	2100
Tensile Stress at Yield, 23 °C	ISO 527	MPa	26
Tensile Strain at Break, 23 °C	ISO 527	%	40
Flexural Modulus, 23 °C	ISO 178	MPa	1950
Flexural Strength, 23 °C	ISO 178	MPa	48
Hardness, Shore D	ISO 868	-	78
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	76
Vicat Softening Temperature, VST/A/120 (10N, 120 °C/h)	ISO 306	°C	99

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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	71
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	81
Optical Properties			
Refractive Index, Sodium D Line	ISO 489	-	1.57
Haze	ASTM D 1003	%	1.8
Light Transmission at 550 nm	ASTM D 1003	%	90
Other Properties			
Density	ISO 1183	kg/m³	1050
Water Absorption, Saturated at 23 °C	ISO 62	%	0.1
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	0.05
Processing			
Melt Temperature Range	ISO 294	°C	200 - 240
Mold Temperature Range	ISO 294	°C	30 - 55
Drying Temperature	-	°C	65
Drying Time	-	h	2