

# Zylar 960

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®960 is the grade with the highest toughness at still high transparency.

### FEATURES

- High flowability
- Impact strength
- Sterilisable(ETO,NO2,Irradiation)
- Low density

### APPLICATIONS

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

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm <sup>3</sup> /10 min	6
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm <sup>3</sup> /10 min	65
<b>Mechanical Properties</b>			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	16
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m <sup>2</sup>	15
Tensile Modulus	ISO 527	MPa	1650
Tensile Stress at Yield, 23 °C	ISO 527	MPa	28
Tensile Strain at Yield, 23 °C	ISO 527	%	3.9
Tensile Strain at Break, 23 °C	ISO 527	%	120
Flexural Modulus, 23 °C	ISO 178	MPa	1650
Flexural Strength, 23 °C	ISO 178	MPa	45
Hardness, Ball Indentation	ISO 2039-1	MPa	35
Hardness, Shore D	ISO 868	-	72
<b>Thermal Properties</b>			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	60

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Property, Test Condition	Standard	Unit	Values
Vicat Softening Temperature, VST/A/120 (10N, 120 °C/h)	ISO 306	°C	90
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	67
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	78
<b>Optical Properties</b>			
Refractive Index, Sodium D Line	ISO 489	-	1.56
Haze	ASTM D 1003	%	1.8
Light Transmission at 550 nm	ASTM D 1003	%	89
<b>Other Properties</b>			
Density	ISO 1183	kg/m <sup>3</sup>	1050
Water Absorption, Saturated at 23 °C	ISO 62	%	0.1
Moisture Absorption, Equilibrium 23 °C/50% RH	ISO 62	%	0.05
<b>Processing</b>			
Melt Temperature Range	ISO 294	°C	200 - 240
Mold Temperature Range	ISO 294	°C	30 - 55
Drying Temperature	-	°C	65
Drying Time	-	h	2