

**Zylar® 245**  
MBS

INEOS Styrolution

Zylar® 245 is a blend from styrene, butadiene and methylmethacrylate copolymer (MBS). Zylar® 245 is highly transparent, tough and shows a good chemical resistance. Depending on the application, it can be a low density alternative for polycarbonate, PET-G or transparent ABS (MABS). It is suitable for medical applications, food contact statements are available upon request. Zylar® 245 provides highest transparency and stiffness.

Rheological properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	48	cm³/10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	47	MPa	ISO 527
Yield strain	2.8	%	ISO 527
Impact Strength (Charpy), +23°C	15	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	2	kJ/m²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load (1.80 MPa)	72	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	85	°C	ISO 75-1/-2
Vicat softening temperature, 50°C/h 50N	78	°C	ISO 306
Burning Behav. at 1.5 mm Nom. Thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-
Burning Behav. at thickness h	HB	class	UL 94
Thickness tested	3.0	mm	-
UL recognition	yes	-	-

Other Properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Water Absorption	0.1	%	Sim. to ISO 62
Humidity absorption	0.05	%	Sim. to ISO 62
Density	1050	kg/m³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Density of melt	950	kg/m³	-
Thermal Conductivity of Melt	0.223	W/(m K)	-
Spec. heat capacity of melt	2160	J/(kg K)	-
Ejection temperature	90	°C	-

Optical Properties	Value	Unit	Test Standard
<b>ASTM Data</b>			
Haze	1.5	%	ASTM D 1003
Light Transmittance	90	%	ASTM D 1003

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	65	°C	-
Pre-drying - Time	2	h	-
Melt temperature	200 - 240	°C	-
Mold temperature	30 - 55	°C	-

**Characteristics****Processing**

Injection Molding

**Chemical Resistance**

General Chemical Resistance, Radiation Resistance

**Delivery form**

Pellets

**Special Characteristics**

Transparent, Sterilizable, Ethylene Oxide (EtO) Sterilization, Gamma irradiation sterilization

**Features**

Copolymer

**Certifications**

Medical, Biocompatibility ISO 10993, US Pharmacopeia Class VI Approved, Drug Master File, Long term supply assurance, Food approval, Food approval 10/2011, Food Contact (FDA)

**Applications**

Medical

**Injection Molding**

**PREPROCESSING**

Pre-drying, Temperature: 65°C

Pre-drying, Time: 2h

**PROCESSING**

Melt temperature, range: 200 - 240°C

Mold temperature, range: 30 - 55°C

**Disclaimer**

**Liability Exclusion**

These guide values are measured and provided by the product manufacturer and have been determined on standardised test specimens and can be affected by pigmentation, mould design and processing conditions. M-Base has taken the guide values from the producer's original Technical Data Sheet. **ALBIS AND M-BASE ARE THEREFORE NOT RESPONSIBLE FOR THE ACCURACY OF THE GUIDE VALUES AND CANNOT GIVE ANY WARRANTY WITH REGARD TO THEIR CORRECTNESS.**

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- risk class III applications according to EU directive 93/42/EEC
- any bodily implant application for greater than 30 days
- any critical component in any medical device that supports or sustains human life.

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