

Zylar® 550

MBS-I

INEOS Styrolution Europe GmbH

Zylar® 550 is an impact modified styrene acrylic copolymer that provides practical toughness, good clarity and superior processing characteristics for demanding injection molded applications.

Rheological properties	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	55	cm ³ /10min	ISO 1133
Temperature	220	°C	-
Load	10	kg	-

Mechanical Properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2100	MPa	ISO 527
Yield stress	28	MPa	ISO 527
Yield strain	2	%	ISO 527
Charpy impact strength (+23°C)	no break	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	4	kJ/m ²	ISO 179/1eA

Thermal Properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load (1.80 MPa)	70	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	81	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	HB	class	UL 94
Thickness tested	1.5	mm	-
UL recognition	yes	-	-

Other Properties	Value	Unit	Test Standard
ISO Data			
Water absorption	0.1	%	Sim. to ISO 62
Humidity absorption	0.05	%	Sim. to ISO 62
Density	1050	kg/m ³	ISO 1183

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

Test specimen production	Value	Unit	Test Standard
ISO Data			
Injection Molding, melt temperature	210	°C	ISO 294
Injection Molding, mold temperature	50	°C	ISO 294
Injection Molding, injection velocity	200	mm/s	ISO 294

Characteristics
Processing

Injection Molding

Delivery form

Pellets

Special Characteristics

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

Features

Copolymer

Chemical Resistance

Radiation Resistance

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: 2 h

PROCESSING

injection molding, Melt temperature, range: 200 - 240 °C
injection molding, Melt temperature, recommended: 210 °C
injection molding, Mold temperature, range: 30 - 55 °C
injection molding, Mold temperature, recommended: 50 °C

Disclaimer

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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