

ZYLAR® 960

Methyl Methacrylate Butadiene Styrene
INEOS Styrolution Group GmbH

Message:

ZYLAR 960 is an impact modified styrene acrylic copolymer that provides toughness equivalent to some grades of polycarbonate, good clarity and superior processing characteristics for demanding injection molded applications.

General Information			
UL YellowCard	E55776-100996467		
Additive	Impact Modifier		
Features	Ethylene Oxide Sterilizable		
	Good Processability		
	Good Toughness		
	Impact Modified		
	Low Density		
	Medium Clarity		
	Radiation Sterilizable		
Uses	Appliances		
	Consumer Applications		
	Housings		
	Industrial Applications		
	Medical/Healthcare Applications		
	Toys		
Agency Ratings	USP XXIII, Class VI		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.05	g/cm ³	ASTM D792, ISO 1183
Melt Mass-Flow Rate (MFR) (200°C/5.0 kg)	6.0	g/10 min	ASTM D1238
Melt Volume-Flow Rate (MVR)			ISO 1133
200°C/5.0 kg	6.00	cm ³ /10min	
220°C/10.0 kg	65.0	cm ³ /10min	
Molding Shrinkage			
Flow	0.20 to 0.60	%	ASTM D955
--	0.20 to 0.60	%	ISO 294-4
Water Absorption (Saturation, 23°C)	0.10	%	ASTM D570, ISO 62
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	62		ASTM D785, ISO 2039-2

Ball Indentation Hardness	35.0	MPa	ISO 2039-1
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
--	1720	MPa	ASTM D638
--	1640	MPa	ISO 527-2
Tensile Strength			
Yield, 23°C	23.4	MPa	ASTM D638
Yield, 23°C	28.0	MPa	ISO 527-2
Tensile Elongation			
Break	70	%	ASTM D638
Break, 23°C	120	%	ISO 527-2
Flexural Modulus			
--	1720	MPa	ASTM D790
--	1640	MPa	ISO 178
Flexural Strength			
--	42.7	MPa	ASTM D790
--	45.0	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength (23°C)	16	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength (23°C)	No Break		ISO 179
Notched Izod Impact			
23°C	590	J/m	ASTM D256
23°C	15	kJ/m ²	ISO 180/A
Unnotched Izod Impact Strength	200	kJ/m ²	ISO 180
Gardner Impact	19.2	J	ASTM D5420
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature			
0.45 MPa, Annealed	78.0	°C	ISO 75-2/B
1.8 MPa, Annealed	86.1	°C	
1.8 MPa, Annealed	67.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	93.9	°C	ASTM D1525 ¹
--	60.0	°C	ISO 306/B50
Maximum Service Temperature	250	°C	
Optical	Nominal Value	Unit	Test Method
Refractive Index			
-- ²	1.570		ASTM D542
--	1.560		ISO 489
Transmittance (550 nm)	91.0	%	ASTM D1003
Haze	2.0	%	ASTM D1003
Injection	Nominal Value	Unit	
Drying Temperature	65.0	°C	

Drying Time	2.0	hr
Rear Temperature	190 to 220	°C
Middle Temperature	200 to 230	°C
Front Temperature	200 to 230	°C
Processing (Melt) Temp	200 to 240	°C
Mold Temperature	30.0 to 55.0	°C
Injection Rate	Moderate-Fast	

NOTE

1. Rate B (120°C/h), Loading 1 (10 N)
2. Sodium D Line

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

