

Zylar 771

Methyl Methacrylate Butadiene Styrene (MBS)

TECHNICAL  
DATASHEET

DESCRIPTION

Zylar® is an impact modified styrene acrylic copolymer that provides practical toughness, excellent clarity and superior processing characteristics. Zylar® 771 is an acrylonitrile modified grade with excellent chemical resistance and drop impact resistance.

FEATURES

- Good balance of toughness, stiffness and clarity
- Low density
- Ease of processing
- Excellent Chemical Resistance
- Outstanding Drop Impact Resistance

APPLICATIONS

- Household Applications
- Toys, sports and leisure

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate, 200 °C/5 kg	ISO 1133	cm³/10 min	7
Mechanical Properties			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	13
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	10
Charpy Unnotched, 23 °C	ISO 179/1eU	kJ/m²	no break
Tensile Stress at Yield, 23 °C	ISO 527	MPa	30
Tensile Strain at Break, 23 °C	ISO 527	%	60
Tensile Modulus	ISO 527	MPa	1800
Flexural Strength, 23 °C	ISO 178	MPa	45
Flexural Modulus, 23 °C	ISO 178	MPa	1900
Puncture Test (by IPT)	ISO 6603-2	J	45
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	70
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	97

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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	91
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	97
Optical Properties			
Light Transmission at 550 nm	ASTM D 1003	%	89
Haze	ASTM D 1003	%	4.5
Other Properties			
Density	ISO 1183	kg/m³	1035

Typical values for uncolored products  
Please note that all processing data stated are only indicative and may vary depending on the individual processing complexities.  
Please consult our local sales or technical representatives for details.

SUPPLY FORM

Zylar® 771 resins are available in bulk, 25kg bags or octabin cartons.

PROCESSING

Zylar® 771 is a low moisture absorption copolymer and in many instances processes readily without pre-drying. There are combinations of conditions that require the product to be dried, such as high humidity and heavy section molding. Two hours at 60°C (140°F) is adequate for most applications. Dehumidifying type driers are recommended. To obtain maximum clarity and gloss from this product, it is necessary to have a highly polished mold. Design of gates, runners and sprues can be patterned after standard prac-tice for high-heat polystyrene. All mold surfaces must be temperature controlled at 54°C (130°F) for optimum clarity and surface gloss. For optimum clarity, machine cylinders, barrels, screws, valves, etc. should be thoroughly cleaned before processing. Contamination by other materials will cause streaking or haze.

PRODUCT SAFETY

During processing of Zylar® 771 small quantities of styrene monomer may be released into the atmosphere. At styrene vapor concentrations below 20ppm no negative effects on health are expected. In our experience, the concentration of styrene does not exceed 1 ppm in well ventilated workplaces - that is were five to eight air changes per hour are made.

DISCLAIMER

The above mentioned data are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its processability. INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not

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the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.

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