

AZDEL™ U421B02N (Transverse)

Polypropylene Alloy

Azdel, Inc.

Message:

Azdel® U421B02N is a uni-directional fiber and random glass mat reinforced polypropylene composite featuring excellent fiber distribution over long flow paths and complex part forms. This material allows highly directionalised reinforcement in applications where major loads are in defined planes. The material can be combined with Azdel random mat products to reinforce localized high stress paths, minimizing both part weight and costs.

General Information			
Filler / Reinforcement	Glass fiber reinforced material, 42% filler by weight		
Uses	Laminate		
Forms	Sheet		
Processing Method	Compression molding		
Physical	Nominal Value	Unit	Test Method
Density	1.25	g/cm ³	ISO 1183
Molding Shrinkage	0.40	%	ISO 294-4
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	4200	MPa	ISO 527-2
Tensile Stress (Yield)	50.0	MPa	ISO 527-2
Tensile Strain (Break)	2.0	%	ISO 527-2
Flexural Modulus	5000	MPa	ISO 178
Flexural Stress	130	MPa	ISO 178
Impact	Nominal Value	Unit	Test Method
Charpy Unnotched Impact Strength	60	kJ/m ²	ISO 179/2fnU
Multi-Axial Instrumented Impact Energy			ISO 6603-2
4.00, energy to power peak	58.0	J	ISO 6603-2
4.00, total impact penetration energy	100	J	ISO 6603-2
Multi-Axial Instrumented Impact Peak Force (4.00 mm)	13300	N	ISO 6603-2
Thermal	Nominal Value	Unit	Test Method
Heat Deflection Temperature (1.8 MPa, Unannealed)	145	°C	ISO 75-2/A
Melting Temperature (DSC)	166	°C	ISO 3146
Additional Information			

Mass Per Unit Area, Azdel Test Method: 4.840 kg/m²Thickness, Azdel Test Method: 3.9 mmDensity, ISO 1183 Test Method: 1.21 g/cm³Density, ISO 1183 Test Method, Molded Plaque: 1.25 g/cm³Recrystallizing Temperature, ISO 3146 Test Method: 119 °CCTLE, Azdel Test Method, -30°C to 0°C, 3mm: 5.0e-5 1/°CCTLE, Azdel Test Method, 0°C to 120°C, 3mm: 3.3e-5 1/°CBlank Heat Parameters-Internal Temperature: 190 to 215°C-Surface Temperature: 205 to 220°C-Typical Heating Time for IR-System: 180 to 240°C-Typical Heating Time for Hot Air System: 240 to 480°C-Mould Temperature: 30 to 90°C-Moulding Pressure: 150 to 250 barMinimum Pressing Speed: 20 mm/secTotal Cycle Time: 30 to 90 sec

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.

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

