

MAGNUM™ A533UT

ABS Resin

Overview

MAGNUM™ A533UT is a ABS resins with differentiated quality of low gel. It has an ultra low particulate content, which results in a superb surface finish that will enable our customers to produce products with excellent aesthetics. It has medium impact and heat performance, and is designed for extrusion applications.

Applications:

- High end extrusion applications
- Extrusion films

Complies with:

- U.S. FDA 21 CFR 181.32(a)(3)(i)
- Consult the regulation for complete details

Physical	Nominal Value (English)	Nominal Value (SI)	Test Method
Density	1.05 g/cm ³	1.05 g/cm ³	ISO 1183
Melt Mass-Flow Rate (MFR) (220°C/10.0 kg)	11 g/10 min	11 g/10 min	ISO 1133
Molding Shrinkage	4.0E-3 to 7.0E-3 in/in	0.40 to 0.70 %	ISO 294-4
Mechanical	Nominal Value (English)	Nominal Value (SI)	Test Method
Tensile Strength			
Yield ¹	5660 psi	39.0 MPa	ASTM D638
Yield	5370 psi	37.0 MPa	ISO 527-2/50
Break ¹	4500 psi	31.0 MPa	ASTM D638
Break	4350 psi	30.0 MPa	ISO 527-2/50
Tensile Elongation			
Break ¹	20 %	20 %	ASTM D638
Break	50 %	50 %	ISO 527-2/50
Flexural Modulus ²	297000 psi	2050 MPa	ASTM D790
Flexural Strength ²	9280 psi	64.0 MPa	ASTM D790
Impact	Nominal Value (English)	Nominal Value (SI)	Test Method
Charpy Notched Impact Strength (73°F (23°C))	6.7 ft·lb/in ²	14 kJ/m ²	ISO 179/1eA
Notched Izod Impact (73°F (23°C))	3.7 ft·lb/in	200 J/m	ASTM D256
Thermal	Nominal Value (English)	Nominal Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
264 psi (1.8 MPa), Annealed	210 °F	99.0 °C	
Vicat Softening Temperature	214 °F	101 °C	ISO 306/B50

Additional Information

Mass balance versions (bio-based (BIO) or chemically recycled (CR)) of this product are chemically and physically indistinguishable to the standard fossil grade. This technical data sheet applies to all versions. Letters of sameness are available upon request.

Injection	Nominal Value (English)	Nominal Value (SI)
Drying Temperature	176 to 194 °F	80 to 90 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr

Notes

These are typical properties only and are not to be construed as specifications. Users should confirm results by their own tests.

¹ 2.0 in/min (50 mm/min)

² 0.051 in/min (1.3 mm/min)

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