Dow Magnum® 9555 ABS, High Impact

Categories: Polymer; Thermoplastic; ABS Polymer; Acrylonitrile Butadiene Styrene (ABS), Heat Resistant, Molded

Material Notes: MAGNUM® ABS resins are thermoplastic materials which provide an excellent balance of processability, impact resistance and heat resistance as imparted by the various polymer compositions. MAGNUM ABS resin are available in a wide range of melt flow rates, impact strength and heat resistance for both high and low gloss applications manufactured by injection molding, sheet or profile extrusion and thermoforming.

The MAGNUM 9000 series of high gloss ABS resins are designed to offer a wide range of impact strengths and melt flow rates to meet the needs of the durables injection molding markets. The 9000 series products offer typical Izod impact strength values from 210 to 400 J/m and melt flow rates ranging from 2.5 to 7.0 g/10min. The gloss values are typically greater than 95% on the 60. Gardner scale for the highest gloss resins and greater than 90% for those products having a broader range of gloss.

MAGNUM 9555 ABS resin offers a broader range of gloss while maintaining high impact strength with a medium melt flow rate.

Data provided by Dow Chemical.

Key Words: Poly(Acrylonitrile Butadiene Styrene)

Vendors: No vendors are listed for this material. Please click here if you are a supplier and would like information on how to add your listing to this material.

Physical Properties	Metric	English	Comments
Density	1.04 g/cc	0.0376 lb/in³	ASTM Data
Linear Mold Shrinkage	0.00550 cm/cm	0.00550 in/in	
Melt Flow	5.00 g/10 min	5.00 g/10 min	230°C/3.8 kg. ASTM Data

Mechanical Properties	Metric	English	Comments
Hardness, Rockwell R	107	107	
Tensile Strength, Ultimate	31.0 MPa	4500 psi	ASTM Data
Tensile Strength, Yield	44.8 MPa	6500 psi	ASTM Data
Elongation at Break	40.0 %	40.0 %	ASTM Data
Elongation at Yield	2.30 %	2.30 %	ISO Data
Tensile Modulus	2.24 GPa	325 ksi	ASTM Data
Charpy Impact Unnotched	NB	NB	ISO Data
Charpy Impact, Notched, Low Temp	0.900 J/cm²	4.28 ft-lb/in²	ISO Data
Charpy Impact, Unnotched Low Temp	NB	NB	ISO Data
Charpy Impact, Notched	2.90 J/cm²	13.8 ft-lb/in²	ISO Data
Impact Test	55.0 J	40.6 ft-lb	Instrumented Dart Total Energy, 23°C
Izod Impact, Notched	3.20 J/cm	5.99 ft-lb/in	ASTM Data

Thermal Properties	Metric	English	Comments
CTE, linear	91.0 µm/m-°C @Temperature 20.0 °C	50.6 µin/in-°F @Temperature 68.0 °F	Parallel to Flow; ISO data
Deflection Temperature at 0.46 MPa (66 psi)	92.0 °C	198 °F	Unannealed; ASTM Data
Deflection Temperature at 1.8 MPa (264 psi)	77.0 °C	171 °F	Unannealed; 103°C (217°F) annealed; ASTM Data
Vicat Softening Point	106 °C	223 °F	
Flammability, UL94	HB	HB	1.47 mm

Optical Properties	Metric	English	Comments
Gloss	90.0 %	90.0 %	Gardner Gloss, 60°