

Product Texts

Ultramid B5W BM UN is a high-viscosity stabilized PA6 extrusion grade with high resistance to heat aging.

Typical applications include tubes in the automotive sector, semi-finished products and blow mouldings.

Mechanical properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Tensile Modulus	2984 / -	MPa	ISO 527
^[C] Charpy notched impact strength, +23°C	6.8 / -	kJ/m ²	ISO 179/1eA

[C]: CAMPUS

Thermal properties	dry / cond	Unit	Test Standard
ISO Data			
^[C] Melting temperature, 10°C/min	219 / *	°C	ISO 11357-1/-3
^[C] Temp. of deflection under load, 1.80 MPa	54 / *	°C	ISO 75-1/-2

[C]: CAMPUS

Other properties	dry / cond	Unit	Test Standard
^[C] Density	1130 / -	kg/m ³	ISO 1183

[C]: CAMPUS

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	83	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.15	%	-
Melt temperature	245 - 260	°C	-
Mold temperature	60	°C	-

Characteristics

Processing
Injection Molding, Pipe/Tube Extrusion, Other Extrusion

Applications
Automotive

Special Characteristics
Heat stabilized or stable to heat

Regional Availability
North America

Other text information

Injection molding

PREPROCESSING

Pre/Post-processing, Pre-drying, Temperature: 83 °C
Pre/Post-processing, Pre-drying, Time: 2 - 4 h

PROCESSING

injection molding, Melt temperature, range: 245 - 260 °C
injection molding, Mold temperature, range: 60 °C

Max. Water content: 0.15%

Material is supplied in sealed containers and drying prior to molding in a dehumidifying or desiccant dryer is recommended. Drying parameters are dependent upon the actual percentage of moisture in the pellets and typical pre-drying conditions are 2-4 hours at 180F (83C). Further information concerning safe handling procedures can be obtained from the Safety Data Sheet (MSDS), or by contacting your BASF representative.

Mold temperatures of 60°C (140°F) are generally recommended; however, surface temperatures of 10-95°C (50-203°F) can be

used where applicable. The degree of crystallinity of thin polyamide wall sections, 0.6mm (.023") or less, may be controlled by the temperature of the mold. A cold mold, 5-30°C (41-86°F), will rapidly quench the section producing a clear, relatively flexible part, while a hot mold, over 40°C (104°F), will produce an opaque part with increased stiffness.

A diametrical blow ratio of 2:1 is generally recommended for plain symmetrical parts. As part complexity increases, lower blow ratios should be utilized to prevent thin wall cross sections, especially in corners.