

U310T

Ultra High Molecular Weight Polyethylene

Description:

U310T is an Ultra High Molecular Weight Polyethylene in powder form with an average molecular weight about 3.7 Million g/mol. This resin has high abrasion resistance, low coefficient of friction properties and a high impact strength including transparent property. The resin is normally used for compression molding of sheet and special rod extrusion.

Physical Properties:	Method	Unit	Value*
Density	ASTM D792	g/cm ³	0.930
Bulk density	ISO 60/ ASTM D1895	g/cm ³	0.40
Viscosity number (VN)	ISO 1628 part 3	ml/g	1970
Intrinsic viscosity [η]	ISO 1628 part 3	ml/g	1765
Average molecular weight (cal.)	Internal	g/mol	3.7 x 10 ⁶
Average particle size, X50	ASTM D1921	μm	150
Mechanical Properties:	Method	Unit	Value*
Tensile strength at yield	ISO527/ ASTM D638	MPa	18
Tensile strength at break	ISO527/ ASTM D638	MPa	30
Ultimate elongation	ISO527/ ASTM D638	%	> 300
Izod impact strength	ASTM D256	J/m	NB
Hardness	ISO868/ ASTM D2240	Shore D	58
Thermal Properties:	Method	Unit	Value*
Melting temperature (10°C/min)	ASTM D3418	°C	130 – 135
Vicat softening point (1Kg)	ISO 306/ASTM D1525	°C	128

*Above data, as representative values, are for a guidance purpose only, and not for sales specifications.

Remark: The values presented on the above are typical laboratory average, not to be construed as specifications and may vary within moderate ranges. The applicability or the accuracy of this information or the suitability of our products cannot be guaranteed because the conditions of use on the part or our uses are beyond our control.