

GUR® 2122 - PE-UHMW

Description

UHMW-PE powder for high filler compounds or porous applications - special morphology, low bulk density

Physical properties	Value	Unit	Test Standard
Elongational Stress F, 150/10	0.21	MPa	ISO 11542-2
Average molecular weight	4.2E6	g/mol	Margolies' Equation
Density	930	kg/m ³	ISO 1183
Melt flow rate, MFR	<0.1	g/10min	ISO 1133
MFR temperature	190	°C	ISO 1133
MFR load	21.6	kg	ISO 1133
Intrinsic viscosity	1900	cm ³ /g	ISO 1628-3
Viscosity number (PE and PP)	2100	cm ³ /g	ISO 1628-3
Average particle size, d50	130	µm	Laser scattering

Mechanical properties	Value	Unit	Test Standard
Charpy double 14°v-notch strength, 23°C	170	kJ/m ²	ISO 11542-2
Wear by sandslurry method (based on GUR 4120=100)	100	-	Internal
Tensile modulus	770	MPa	ISO 527-2/1B
Tensile stress at yield	21	MPa	ISO 527-2/1B
Tensile strain at yield	13	%	ISO 527-2/1B
Tensile stress at 50% strain	20	MPa	ISO 527-2/1B
Tensile stress at break	39	MPa	ISO 527-2/1B
Tensile nominal strain at break	400	%	ISO 527-2/1B
Shore D hardness, 15s	60	-	ISO 868

Thermal properties	Value	Unit	Test Standard
DTUL at 1.8 MPa	41	°C	ISO 75-1, -2
Vicat softening temperature, 50°C/h 50N	80	°C	ISO 306

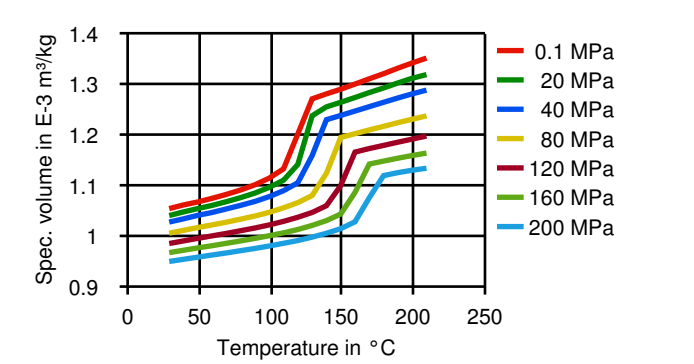
Electrical properties	Value	Unit	Test Standard
Volume resistivity	>1E12	Ohm*m	IEC 60093
Surface resistivity	>1E12	Ohm	IEC 60093



GUR® 2122 - PE-UHMW

Diagrams

Moldflow Specific volume-temperature (pvT)



Other text information

Other extrusion

All ram extruders can be used to produce semi-forms such as rod, tube, board, sheet or profiles.

Temperature Profile: 180-230 °C

Characteristics

Special Characteristics

High viscosity

Product Categories

Specialty, Unfilled

Regulatory

Drinking water approved

Delivery Form

Powder

