

GUR® 4222-5

Heat stabilized coarse particle UHMW-PE powder grade for porous application
Heat stabilized coarse particle UHMW-PE powder grade for porous application

Product information

Average molecular weight	4.4E6 g/mol	Margolies' equation
Average particle size, D50	170 µm	laser scattering

Rheological properties

Melt mass-flow rate, Temperature	190 °C	
Melt mass-flow rate, Load	21.6 kg	
Viscosity number	2200 cm³/g	ISO 307, 1157, 1628
Intrinsic viscosity	1900	ISO 307, 1157, 1628

Typical mechanical properties

Tensile Modulus	800 MPa	ISO 527-1/-2
Yield stress, 50mm/min	21 MPa	ISO 527-1/-2
Yield strain, 50mm/min	15 %	ISO 527-1/-2
Stress at 50% strain	21 MPa	ISO 527-1/-2
Stress at break, 50mm/min	41 MPa	ISO 527-1/-2
Nominal strain at break	380 %	ISO 527-1/-2
Elongational stress, 150/10	0.24 MPa	ISO 21304-2
Charpy double notched impact strength, 23°C	120 kJ/m²	ISO 21304-2

Tribological properties

Relative Wear (based on GUR 4120=100), sandslurry method	110	Internal
---	-----	----------

Other properties

Density	930 kg/m³	ISO 1183
Bulk density	410 kg/m³	ISO 60

