

GUR® 4122-5

Coarse particle UHMW-PE powder grade
 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
Shore D hardness, 15s	60	ISO 48-4 / ISO 868

Thermal properties

Temp. of deflection under load, 1.8 MPa	41 °C	ISO 75-1/-2
Vicat softening temperature, 50 °C/h, 50N	80 °C	ISO 306

Electrical properties

Volume resistivity	>1E12 Ohm.m	IEC 62631-3-1
Surface resistivity	>1E12 Ohm	IEC 62631-3-2

Other properties

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

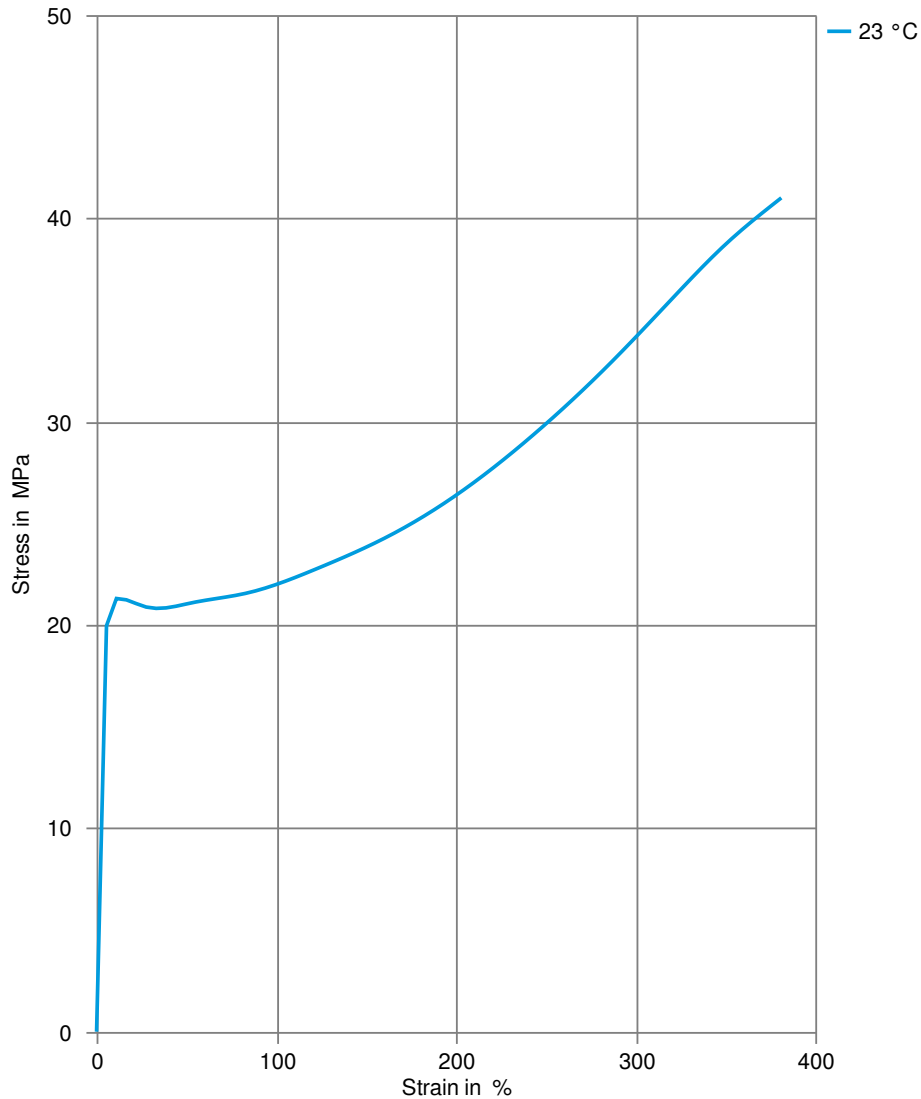
Characteristics

Food contact	FDA 21 CFR
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Stress-strain



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Secant modulus-strain

