

GUR® 5129

Melt processable UHMW-PE pellet grade

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Product information

Average molecular weight	3.4E6 g/mol	Margolies' equation
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Rheological properties

Melt mass-flow rate, Temperature	190 °C	
Melt mass-flow rate, Load	21.6 kg	
Viscosity number	1800 cm³/g	ISO 307, 1157, 1628
Intrinsic viscosity	1600	ISO 307, 1157, 1628

Typical mechanical properties

Tensile Modulus	900 MPa	ISO 527-1/-2
Yield stress, 50mm/min	23 MPa	ISO 527-1/-2
Yield strain, 50mm/min	11 %	ISO 527-1/-2
Stress at 50% strain	20 MPa	ISO 527-1/-2
Stress at break, 50mm/min	34 MPa	ISO 527-1/-2
Nominal strain at break	420 %	ISO 527-1/-2
Charpy double notched impact strength, 23°C	140 kJ/m²	ISO 21304-2

Tribological properties

Relative Wear (based on GUR 4120=100), sandslurry method	155	Internal
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Thermal properties

Vicat softening temperature, 50°C/h, 50N	80 °C	ISO 306
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Electrical properties

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

Other properties

Density	940 kg/m³	ISO 1183
Bulk density	500 kg/m³	ISO 60

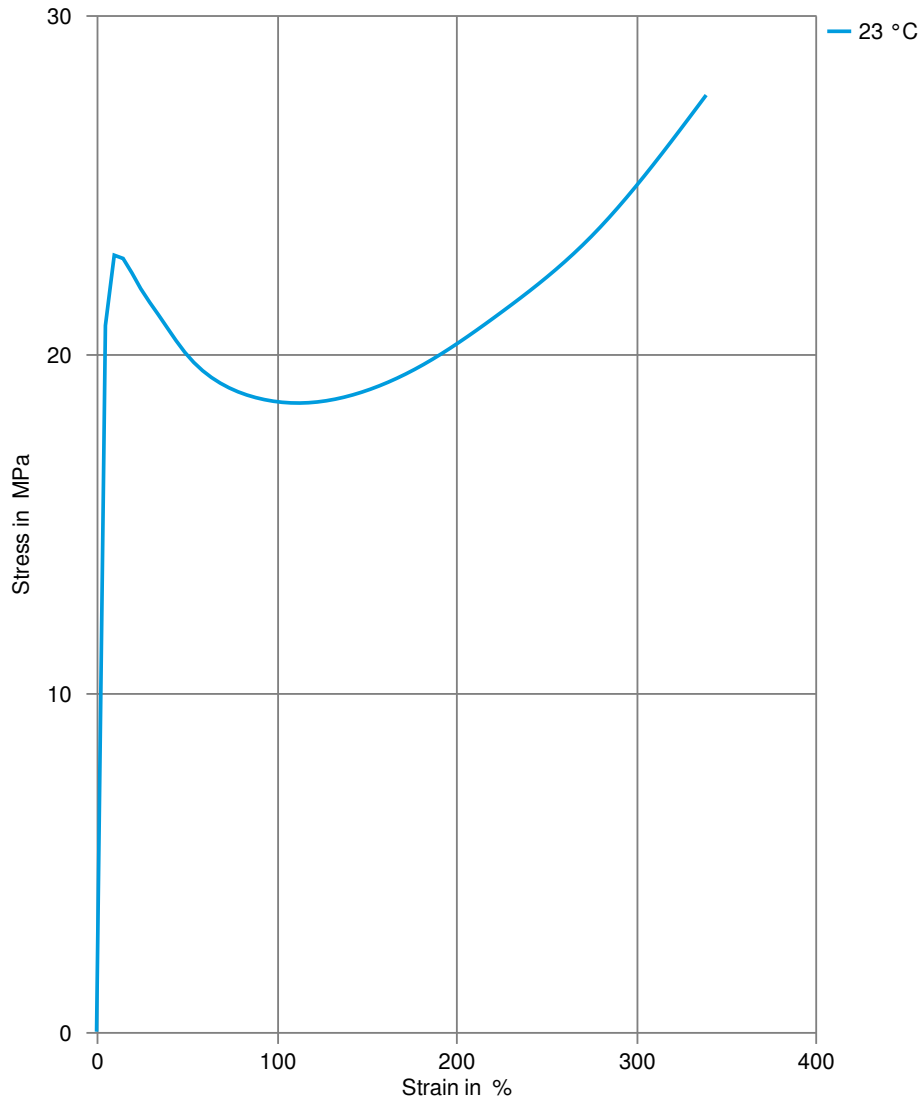
Characteristics

Food contact	FDA 21 CFR
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Stress-strain



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Secant modulus-strain

