

**GUR® X 234 - PE-HMW**

Experimental Grade. Please contact your Celanese representative for further information.

<b>Physical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Elongational Stress F, 150/10	<b>0.02</b>	MPa	ISO 11542-2
Average molecular weight	<b>1000000</b>	g/mol	Margolies' Equation
Density	<b>940</b>	kg/m <sup>3</sup>	ISO 1183
Melt flow rate, MFR	<b>&lt;0.1</b>	g/10min	ISO 1133
MFR temperature	<b>190</b>	°C	ISO 1133
MFR load	<b>21.6</b>	kg	ISO 1133
Intrinsic viscosity	<b>700</b>	cm <sup>3</sup> /g	ISO 1628-3
Viscosity number (PE and PP)	<b>750</b>	cm <sup>3</sup> /g	ISO 1628-3
Average particle size, d50	<b>115</b>	µm	Laser scattering

  

<b>Mechanical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Charpy double 14°v-notch strength, 23°C	<b>125</b>	kJ/m <sup>2</sup>	ISO 11542-2
Wear by sandslurry method (based on GUR 4120=100)	<b>170</b>	-	Internal
Tensile modulus	<b>950</b>	MPa	ISO 527-2/1B
Tensile stress at yield	<b>24</b>	MPa	ISO 527-2/1B
Tensile strain at yield	<b>11</b>	%	ISO 527-2/1B
Tensile stress at 50% strain	<b>19</b>	MPa	ISO 527-2/1B
Tensile stress at break	<b>41</b>	MPa	ISO 527-2/1B
Tensile nominal strain at break	<b>750</b>	%	ISO 527-2/1B
Shore D hardness, 15s	<b>61</b>	-	ISO 868

  

<b>Thermal properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
DTUL at 1.8 MPa	<b>42</b>	°C	ISO 75-1, -2
Vicat softening temperature, 50°C/h 50N	<b>80</b>	°C	ISO 306

  

<b>Electrical properties</b>	<b>Value</b>	<b>Unit</b>	<b>Test Standard</b>
Volume resistivity	<b>&gt;1E12</b>	Ohm*m	IEC 60093
Surface resistivity	<b>&gt;1E12</b>	Ohm	IEC 60093