

## GUR® X 217 - PE-UHMW

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

| Physical properties                               | Value | Unit               | Test Standard       |
|---------------------------------------------------|-------|--------------------|---------------------|
| Elongational Stress F, 150/10                     | 0.12  | MPa                | ISO 11542-2         |
| Average molecular weight                          | 5.5E6 | g/mol              | Margolies' Equation |
| Density                                           | 940   | kg/m <sup>3</sup>  | 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            |
| Viscosity number (PE and PP)                      | 2250  | cm <sup>3</sup> /g | ISO 1628-3          |
| Average particle size, d50                        | 650   | µm                 | Laser scattering    |
| Mechanical properties                             | Value | Unit               | Test Standard       |
| Charpy double 14°v-notch strength, 23°C           | 160   | kJ/m <sup>2</sup>  | ISO 11542-2         |
| Wear by sandslurry method (based on GUR 4120=100) | 130   | -                  | Internal            |
| Tensile modulus                                   | 880   | MPa                | ISO 527-2/1B        |
| Tensile stress at yield                           | 23    | MPa                | ISO 527-2/1B        |
| Tensile strain at yield                           | 12    | %                  | ISO 527-2/1B        |
| Tensile stress at 50% strain                      | 21    | MPa                | ISO 527-2/1B        |
| Tensile stress at break                           | 33    | MPa                | ISO 527-2/1B        |
| Tensile nominal strain at break                   | 360   | %                  | ISO 527-2/1B        |
| Thermal properties                                | Value | Unit               | Test Standard       |
| Vicat softening temperature, 50°C/h 50N           | 80    | °C                 | ISO 306             |
| Electrical properties                             | Value | Unit               | Test Standard       |
| Surface resistivity                               | >1E12 | Ohm                | IEC 60093           |

