



**MCP ENGINEERING PLASTICS LIMITED**  
 11 Thorley Fields Business Park  
 Wood Street  
 Bishop's Stortford  
 Hertfordshire  
 CM23 4TR



Phone: 01279 739399  
 Email: sales@mcpengineering.co.uk

**HMW PE (High Molecular Weight Polyethylene)**

**Material Specification  
 (Typical Properties)**

Technical

| Property                             | Method           | Units             | Specification |
|--------------------------------------|------------------|-------------------|---------------|
| Modulus of elasticity (tensile test) | DIN 53457        | MPa               | 700           |
| Tensile strength                     | DIN EN ISO 527-2 | MPa               | 32            |
| Tensile strength at yield            | DIN 53455        | MPa               | >28           |
| Elongation at yield                  | DIN 53455        | %                 | 8             |
| Elongation at break                  | DIN 53455        | %                 | >50           |
| Impact strength (Charpy)             | DIN 53455        | kJ/m <sup>2</sup> | No break      |
| Notched impact strength (Charpy)     | DIN 53455        | kJ/m <sup>2</sup> | No break      |
| Ball indentation hardness            | DIN 53456        | MPa               | 38            |

Electrical

| Property                    | Method    | Units   | Specification    |
|-----------------------------|-----------|---------|------------------|
| Specific surface resistance | DIN 53482 | Ohms    | 10 <sup>12</sup> |
| Specific volume resistance  | DIN 53482 | Ohms.cm | 10 <sup>14</sup> |

Thermal

| Property            | Method    | Units | Specification |
|---------------------|-----------|-------|---------------|
| Service temperature | DIN 53476 | Ohms  | DIN 8075      |

Disclaimer. These figures are typical values for the material and do not represent a product specification. Properties will vary depending on source of raw material, method of processing, physical form of product, direction of measurement etc.