# Makrolon® 1954

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| **PC/PTFE grades / PTFE 5** | MVR (300 °C/1.2 kg) 18 cm³/10 min; low viscosity; UV stabilized; improved friction characteristics; injection molding - melt temperature 280 - 320 °C; available in opaque colors only; housings- and operating parts; sliding elements |
| **ISO Shortname** | ISO 7391-PC,MLS,(,,)-18-9 |

| | Property | Test Condition | Unit | Standard | typical Value |
|---|---|---|---|---|---|
| **Rheological properties** | | | | | |
| C | Melt volume-flow rate | 300 °C; 1.2 kg | cm³/10 min | ISO 1133 | 18 |
| | Melt mass-flow rate | 300 °C; 1.2 kg | g/10 min | ISO 1133 | 19 |
| **Mechanical properties (23 °C/50 % r. h.)** | | | | | |
| C | Tensile modulus | 1 mm/min | MPa | ISO 527-1,-2 | 2300 |
| C | Yield stress | 50 mm/min | MPa | ISO 527-1,-2 | 63 |
| C | Yield strain | 50 mm/min | % | ISO 527-1,-2 | 5.6 |
| | Stress at break | 50 mm/min | MPa | ISO 527-1,-2 | 60 |
| | Strain at break | 50 mm/min | % | b.o. ISO 527-1,-2 | 100 |
| | Flexural modulus | 2 mm/min | MPa | ISO 178 | 2300 |
| | Flexural strength | 2 mm/min | MPa | ISO 178 | 94 |
| | Flexural strain at flexural strength | 2 mm/min | % | ISO 178 | 6.6 |
| | Flexural stress at 3.5 % strain | 2 mm/min | MPa | ISO 178 | 73 |
| C | Charpy impact strength | 23 °C | kJ/m² | ISO 179-1eU | N |
| C | Charpy impact strength | -30 °C | kJ/m² | ISO 179-1eU | N |
| | Charpy notched impact strength | 23 °C; 3 mm | kJ/m² | ISO 7391/b.o. ISO 179-1eA | 12C |
| **Thermal properties** | | | | | |
| C | Temperature of deflection under load | 1.80 MPa | °C | ISO 75-1,-2 | 124 |
| C | Temperature of deflection under load | 0.45 MPa | °C | ISO 75-1,-2 | 136 |
| C | Vicat softening temperature | 50 N; 50 °C/h | °C | ISO 306 | 143 |
| C | Burning behavior UL 94 (1.5 mm) | 1.5 mm | Class | UL 94 | HB |
| **Other properties (23 °C)** | | | | | |
| C | Density | | kg/m³ | ISO 1183-1 | 1215 |
| **Processing conditions for test specimens** | | | | | |
| C | Injection molding-Melt temperature | | °C | ISO 294 | 280 |
| C | Injection molding-Mold temperature | | °C | ISO 294 | 80 |
| C | Injection molding-Injection velocity | | mm/s | ISO 294 | 200 |

**C** These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

Impact properties: N = non-break, P = partial break, C = complete break