



CELCON® TX-31 LOF

CELCON®

- A polymer-modified wear resistance grade (an easy-flow grade) for general injection molding.
- Suitable for applications requiring reduced wear noise and a strong friction and wear resistance without sacrificing mechanical proeprties and a low-emission grade featuring improved heat stability.

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| Resin Identification Part Marking Code | POM >POM< | ISO 1043 ISO 11469 |
| Rheological properties | | |
| Melt mass-flow rate Melt mass-flow rate, Temperature Melt mass-flow rate, Load Moulding shrinkage, parallel | 30 g/10min 190 °C 2.16 kg 2.0 % | ISO 1133 ISO 294-4, 2577 |
| Typical mechanical properties | | |
| Tensile modulus Tensile stress at yield, 50mm/min Tensile strain at yield, 50mm/min Nominal strain at break Flexural modulus Flexural strength Charpy notched impact strength, 23°C Charpy notched impact strength, -30°C Poisson's ratio [C]: Calculated | 2550 MPa 56 MPa 8 % 32 % 2450 MPa 81 MPa 6.5 kJ/m² 4.5 kJ/m² 0.38 ^[C] | ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 178 ISO 179/1eA |
| Thermal properties | | |
| Melting temperature, 10 ° C/min Temperature of deflection under load, 1.8 MPa Coefficient of linear thermal expansion (CLTE), parallel Electrical properties | 165 °C 89 °C 120 E-6/K | ISO 11357-1/-3 ISO 75-1/-2 ISO 11359-1/-2 |
| Volume resistivity Surface resistivity Electric strength | 1E12 Ohm.m 1E16 Ohm 19 kV/mm | IEC 62631-3-1 IEC 62631-3-2 IEC 60243-1 |
| Physical/Other properties | | |
| Humidity absorption, 2mm Density | 0.2 % 1390 kg/m³ | Sim. to ISO 62 ISO 1183 |
| Injection | | |
| Drying Recommended Drying Temperature Drying Time, Dehumidified Dryer Processing Moisture Content Melt Temperature Optimum | no 100 °C 3 - 4 h ≤0.2 % 185 °C | |

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Revised: 2025-01-23 Source: Celanese Materials Database





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| Min. melt temperature | 180 | °C |
|--------------------------|----------|-----|
| Max. melt temperature | 190 | °C |
| Screw tangential speed | ≤0.3 | m/s |
| Mold Temperature Optimum | 70 | °C |
| Min. mould temperature | 60 | °C |
| Max. mould temperature | 80 | °C |
| Hold pressure range | 60 - 120 | MPa |

Characteristics

Processing Injection Moulding

Delivery form Pellets

Special characteristics Low wear / Low friction, Low emissions

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