

Multilene® PE-D

A tough and wear-resistant polyethylene, even at low temperatures. The material has a limited pressure resistance (creep), good anti-adhesion properties, and has good chemical resistance. This material quality is ideally suited for applications in the food industry and is available in various colors.

| General properties | Test method | Value | Unit |
|--|---|--------------------------------|----------------------------------|
| ISO code: | ISO 1183 | HMWPE | |
| Density: | ISO 1183-1 | 0,95 | g/cm3 |
| Water absorption in Air (23°C / 50% RH) | ISO 62 | <0,01 | % |
| Water absorption in Air (23°C / 100% RH) | ISO 62 | <0,01 | % |
| Resistance to hot water | n/a | n/a | |
| Weather resistance | n/a | n/a | |
| | | | |
| Mechanical properties | | | |
| Elongation at break: | ISO 527 | >50 | % |
| Ball indention hardness | ISO 2039 | 48 | MPa |
| Tensile modules of elasticity | ISO 527 | 1200 | MPa |
| Charpy impact strength - notched | ISO 179 | 25 | kJ/m2 |
| Charpy impact strength - unnotched | ISO 179 | No Break | kJ/m2 |
| Compressive stress at 1% | n/a | 6 | MPa |
| Coefficient of friction | ASTM D 1894 | 0,1-0,2 | |
| | | | |
| Thorned proportion | | | |
| Thermal properties | | | 0.0 |
| Melting temperature | n/a | 135 | °C |
| Melting temperature Max. allowable service temp (short period) | n/a | 100 | °C |
| Melting temperature Max. allowable service temp (short period) Max. allowable service temp (long period) | | | °C °C |
| Melting temperature Max. allowable service temp (short period) | n/a | 100 | °C |
| Melting temperature Max. allowable service temp (short period) Max. allowable service temp (long period) | n/a n/a | 100 80 | °C °C |
| Melting temperature Max. allowable service temp (short period) Max. allowable service temp (long period) Min. service temperature | n/a n/a n/a | 100 80 -100 | °C °C °C |
| Melting temperature Max. allowable service temp (short period) Max. allowable service temp (long period) Min. service temperature Coefficient of linear expansion Flammability | n/a n/a n/a n/a | 100 80 -100 150 | °C °C °C |
| Melting temperature Max. allowable service temp (short period) Max. allowable service temp (long period) Min. service temperature Coefficient of linear expansion Flammability Electrical properties | n/a n/a n/a n/a UL94 | 100 80 -100 150 HB | °C °C °C x10 -6 m/(m*K) |
| Melting temperature Max. allowable service temp (short period) Max. allowable service temp (long period) Min. service temperature Coefficient of linear expansion Flammability Electrical properties Dielectric dissipation (at 1MHz) | n/a n/a n/a n/a UL94 ISO 60250 | 100 80 -100 150 HB | °C °C °C x10 -6 m/(m*K) |
| Melting temperature Max. allowable service temp (short period) Max. allowable service temp (long period) Min. service temperature Coefficient of linear expansion Flammability Electrical properties | n/a n/a n/a n/a UL94 | 100 80 -100 150 HB | °C °C °C x10 -6 m/(m*K) |