



POLESTAR POLYMERS

An ISO 9001 : 2015 Certified Company

POLESTAR® CAST NYLON - Natural

Technical Data Sheet - Rods, Sheets, Tubes

| Properties | Test Method | Unit | Value |
|--|---------------------|-------------------|------------------|
| Density (23°C) | DIN EN ISO 1183-1 | g/cm ³ | 1,15 |
| Tensile Strength | DIN EN ISO 527-2 | MPa | 83 |
| Modulus of elasticity (tensile) | DIN EN ISO 527-2 | MPa | 3500 |
| Tensile strength at Yield | DIN EN ISO 527-2 | MPa | 80 |
| Elongation at yield | DIN EN ISO 527-2 | % | 4 |
| Elongation at break | DIN EN ISO 527-2 | % | 40 |
| Flexural strength | DIN EN ISO 178 | Mpa | 109 |
| Modulus of elasticity (flexural) | DIN EN ISO 178 | MPa | 3200 |
| Compression strength (1% / 5%) 5mm/min, 10N | EN ISO 604 | MPa | 19/36/83 |
| Compression modulus | EN ISO 604 | MPa | 2900 |
| Notched impact strength (charpy) | DIN EN ISO 179-1eA | kJ/m ² | 4 |
| Ball Indentation hardness | ISO 2039-1 | MPa | 170 |
| Glass transition temperature | DIN EN ISO 11357 | °C | 40 |
| Melting Temperature | DIN EN ISO 11357 | °C | 215 |
| Services Temperature – long term | | °C | 100 |
| Service temperature – short term max | | °C | 170 |
| Thermal Conductivity | ISO 22007-4:2008 | W/(K*m) | 0,38 |
| Surface resistivity | DIN IEC 60093 | Ω | 10 ¹⁴ |
| Volume resistivity | DIN IEC 60093 | Ω*cm | 10 ¹⁴ |
| Water absorption (24h / 96h) 23°C | DIN ISO 62 | % | 0.2 / 0.4 |
| Flammability (UL 94) | DIN IEC 60695-11-10 | | HB |

Note: The information contained herein are typical values intended for reference and comparison purposes only. They should not be used as a basis for design specifications or quality control. POLESTAR POLYMERS will not provide any legally binding guarantee of certain properties or any suitability.

4, 5, 6, A wing, Meghdoot Indl. Estate, HDIL Industrial Park, Virar (E), Dist. Palghar - 401305, Maharashtra, India

TEL : +91 7798266778, +91 7517771196, +91 7507529482, +91 9168514741, 9021885586

Email : sales@polestarpolymers.com / polestarpolymers@hotmail.com