

# NIRETAN B EXL

*Polyamide 66 natural colour, externally lubricated, easy flowing and fast processing, for injection moulding*

|                 | Properties                          | Test condition | Method      | Unit                             | Value    |
|-----------------|-------------------------------------|----------------|-------------|----------------------------------|----------|
| Flame Behaviour | Glow Wire Temperature (G.W.T)       | S=2.0 mm       | IEC 695-2-1 | °C                               | 750      |
|                 | UL 94 Rating                        | S=1.6 mm       | UL 94       | class                            | V2       |
|                 | UL 94 Rating                        | S=3.2 mm       | UL 94       | class                            | V2       |
| Various         | Moulding Shrinkage                  | parallel       | -           | %                                | 1,0-2,5  |
| Physical        | Density                             | 23°C           | ASTM D792   | g/cm <sup>3</sup>                | 1,14     |
|                 | Water Absorption                    | 24h - 23°C     | ASTM D570   | %                                | 9/10     |
|                 | Humidity Absorption from Atmosphere | 23°C – 50% HR  | ASTM D570   | %                                | 3        |
|                 | Cristalline Melting Temperature     | DSC            | -           | °C                               | 220      |
| Thermal         | Heat Distortion Temperature H.D.T   | 1.82 MPa       | ASTM D648   | °C                               | 60       |
|                 | Linear Expansion Coefficient        | 23°C/55°C      | ISO 11359-2 | 10 <sup>-5</sup> K <sup>-1</sup> | 10       |
| Mechanical      | Flexural Maximum Stress             | 1,3 mm/min     | ASTM D790   | MPa                              | 110/40   |
|                 | Flexural Elastic Modulus            | 1,3 mm/min     | ASTM D790   | MPa                              | 2900/900 |
|                 | Rockwell Hardness                   |                | ASTM D785   | R-scale                          | 120/80   |
|                 | Izod Notched Impact Strength        | 23°C/3,2 mm    | ASTM D256   | J/m                              | 50/>400  |
|                 | Izod Notched Impact Strength        | -20°C/3,2 mm   | ASTM D256   | J/m                              | 40/>200  |
|                 | Elongation                          | 50 mm/min      | ASTM D638   | %                                | 50/>100  |
|                 | Tensile Stress at Yield             | 50 mm/min.     | ASTM D638   | MPa                              | 85/45    |
| Electrical      | Dielectric Strength                 | S=1 mm         | IEC 60243-1 | KV/mm                            | 30/25    |
|                 | Relative Permittivity               | 1 Mhz = secco  | IEC 60250   | -                                | 3,5/4,0  |
|                 | Dissipation Factor                  | 1 Mhz = secco  | IEC 60250   | -                                | 0,02/0,1 |



|                     |       |           |                          |                   |
|---------------------|-------|-----------|--------------------------|-------------------|
| Surface Resistivity | secco | IEC 60093 | $\Omega$                 | $10^{14}/10^{13}$ |
| Volume Resistivity  | secco | IEC 60093 | $\Omega \cdot \text{cm}$ | $10^{15}/10^{12}$ |

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