

# N-Power 3ntr

Intrinsically self-extinguishing PPS having high chemical resistance and good thermal one.

| Mechanical property*                  | Standard  | Unit              | Value |
|---------------------------------------|-----------|-------------------|-------|
| Young modulus                         | ISO 527-2 | MPa               | 2000  |
| Yield tensile strenght                | ISO 527-2 | MPa               | 43.2  |
| Tensile strength at break             | ISO 527-2 | MPa               | 30.5  |
| Elongation at yield                   | ISO 527-2 | %                 | 3.4   |
| Elongation at break                   | ISO 527-2 | %                 | 12.8  |
| Flexural modulus                      | ISO 178   | MPa               | 9900  |
| Flexural yield strength               | ISO 178   | MPa               | 47.1  |
| Flexural strength at break            | ISO 178   | MPa               | --    |
| Flexural elongation at yield          | ISO 178   | %                 | 0.9   |
| Flexural elongation at break          | ISO 178   | %                 | --    |
| Impact resistance (Charpy), unnotched | ISO 179-1 | KJ/m <sup>2</sup> | 107.8 |
| Compression modulus                   | ISO 604   | MPa               | 1615  |
| Compression strength at yield         | ISO 604   | MPa               | 47.2  |
| Compression strain at yield           | ISO 604   | %                 | 8.6   |

| Thermal property                 | Standard   | Unit | Value |
|----------------------------------|------------|------|-------|
| Melting temperature              | ISO 11357  | °C   | 285   |
| Cold cristallization temperature | ISO 11357  | °C   | 123   |
| HDT at 1,80 MPa (unannealed)     | ASTM D 648 | °C   | 105   |

| Other                              | Standard           | Unit              | Value |
|------------------------------------|--------------------|-------------------|-------|
| Density (specific gravity)         | ISO 1183-1         | g/cm <sup>3</sup> | 1.26  |
| Electrical dissipation factor      |                    |                   | --    |
| Flame resistance                   | UL94               |                   | V0**  |
| Railroad application compatibility | EN 45545           |                   | No    |
| Biocompatibility                   |                    |                   | No    |
| Blue card                          |                    |                   | No    |
| Water contact                      |                    |                   | No    |
| Food contact                       | FDA 21; EU 10/2011 |                   | No    |

\*Above values are obtained from samples printed on A4v4 at 0.2mm layer thickness.

\*\*Product is compliant but not certified.

The information presented on this document should be used for comparison and self instruction purposes only and are not intended to substitute customer testing to certify the material suitability for customer use and application.

Actual values will vary according to production settings, test conditions and user part geometry – the above values are not meant to be used as design specification or production control testing reference values.

The user is responsible about the end-of-life disposal/recycling of the product.

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