

TECHNICAL DATA SHEET

TECHNYL C 226F NC

(Previously DOMAMID 6N1 402 NC)

Polyamide 6, nucleated, for injection moulding, natural color

General

| | |
|-----------------------|-------------------|
| Feature | Nucleated |
| Polymer type | PA6 (Polyamide 6) |
| Processing technology | Injection molding |
| Certification | RoHS |

Product identification

| | |
|-----------------------|----------------|
| ISO 1043 abbreviation | PA6 |
| ISO 16396 designation | PA6,M1,S14-030 |

| | Condition | Standard | Unit | Value |
|-------------------------------------|----------------|-----------------|-------------------------|------------|
| Physical properties | | | | |
| Density | | ISO 1183 | g/cm ³ | 1.12 |
| Humidity absorption | T=23°C, 50% RH | ISO 62 | % | 2.4 - 2.6 |
| Molding shrinkage, parallel | | ISO 294-4, 2577 | % | 0.9 - 0.95 |
| Molding shrinkage, normal | | ISO 294-4, 2577 | % | 1 - 1.1 |
| Melt volume-flow rate, MVR, 5.0 kg | 275°C, 5kg | ISO 1133 | cm ³ /10 min | 170 |
| Melt volume-flow rate, MVR, 2.16 kg | 275°C, 2,16 kg | ISO 1133 | cm ³ /10 min | 70 |
| Viscosity number | 96% H2SO4 | ISO 307 | cm ³ /g | 145 |

| | Condition | Standard | Unit | Value |
|---------------------------------------|-----------|--------------|-------------------|---------------------|
| Mechanical properties | | | | dam / cond.* |
| Tensile modulus | 1 mm/min | ISO 527-1/-2 | MPa | 3200 / 900 |
| Stress at break | 50 mm/min | ISO 527-1/-2 | MPa | 65 / 68 |
| Strain at break | 50 mm/min | ISO 527-1/-2 | % | 3.7 / 400 |
| Yield stress | 50 mm/min | ISO 527-1/-2 | MPa | 90 / 85 |
| Yield strain | 50 mm/min | ISO 527-1/-2 | % | 4 / 5 |
| Flexural modulus, ISO 178 | 2 mm/min | ISO 178 | MPa | 2750 / 800 |
| Flexural strength, ISO 178 | 2 mm/min | ISO 178 | MPa | 110 / 35 |
| Charpy impact strength, +23°C | +23°C | ISO 179/1eU | | NB / NB |
| Charpy impact strength, -30°C | -30°C | ISO 179/1eU | kJ/m ² | NB / - |
| Charpy notched impact strength, +23°C | +23°C | ISO 179/1eA | kJ/m ² | 4 / 20 |
| Charpy notched impact strength, -30°C | -30°C | ISO 179/1eA | kJ/m ² | 2.4 / 2.4 |

Thermal properties

| | | | | |
|--|--------------|-------------|----|-----|
| Melting temperature, 10°C/min | | ISO 11357-1 | °C | 221 |
| Temp. of deflection under load, 0.45 MPa | 0.45 MPa | ISO 75 | °C | 156 |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa | ISO 75 | °C | 66 |
| Vicat softening temperature | 50°C/h - 50N | ISO 306 | °C | 199 |

Electrical properties

| | | | | |
|---------------------|--|---------------|-------|--------|
| Volume resistivity | | IEC 62631-3-1 | ohm.m | 1E+013 |
| Surface resistivity | | IEC 62631-3-1 | ohm | 1E+014 |

Burning behaviour

| | | | | |
|-------------------------------------|--|-----------|--|--------------|
| Burning rate, FMVSS, Thickness 1 mm | | FMVSS 302 | | < 100 mm/min |
|-------------------------------------|--|-----------|--|--------------|

Test run at 23°C if not differently specified, DAM state (dry as moulded).
*: conditioned according to ISO 1110

Processing conditions

| | |
|-------------------------------|---|
| Drying temperature/time | 75-85°C / 2-4h (with dew point of dried air < -30 °C) |
| Recommended melt temperature | 240 - 280 °C |
| Recommended mould temperature | 60 - 80 °C |

These parameters are typical of the product but should be related to the type of machinery used and to the type of moulded part.

Disclaimer

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