

TECHNICAL DATA SHEET

TECHNYL C 216 V7 NC

(Previously DOMAMID 6G07)

Polyamide 6, 7% glass fiber reinforced, for injection moulding

General

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

Product identification

| | |
|-----------------------|--------------------|
| ISO 1043 abbreviation | PA6-GF7 |
| ISO 16396 designation | PA6,GF7,M1,S14-040 |

| Condition | Standard | Unit | Value |
|-----------|----------|------|-------|
|-----------|----------|------|-------|

Physical properties

| Condition | Standard | Unit | Value |
|------------------|----------------------|--------------------|-------|
| Density | ISO 1183 | g/cm ³ | 1.17 |
| Viscosity number | 96% H2SO4 ISO 307 | cm ³ /g | 145 |

Mechanical properties

| Condition | Standard | Unit | Value |
|---------------------------------------|--------------------------|-------------------|----------|
| Tensile modulus | 1 mm/min ISO 527-1/-2 | MPa | 4000 / - |
| Stress at break | 5 mm/min ISO 527-1/-2 | MPa | 85 / - |
| Strain at break | 5 mm/min ISO 527-1/-2 | % | 4 / - |
| Flexural modulus, ISO 178 | 2 mm/min ISO 178 | MPa | 3400 / - |
| Flexural strength, ISO 178 | 2 mm/min ISO 178 | MPa | 110 / - |
| Charpy impact strength, +23°C | +23°C ISO 179/1eU | kJ/m ² | 33 / - |
| Charpy notched impact strength, +23°C | +23°C ISO 179/1eA | kJ/m ² | 5 / - |
| Izod impact strength, +23°C | +23°C ISO 180/1U | kJ/m ² | 25 / - |
| Izod notched impact strength, +23°C | +23°C ISO 180/1A | kJ/m ² | 4 / - |

Thermal properties

| Condition | Standard | Unit | Value |
|-------------------------------|-------------|------|-------|
| Melting temperature, 10°C/min | ISO 11357-1 | °C | 221 |

| | Condition | Standard | Unit | Value |
|--------------------------------|------------|---------------|-------|--------|
| Electrical properties | | | | |
| Volume resistivity | | IEC 62631-3-1 | ohm.m | 1E+013 |
| Surface resistivity | | IEC 62631-3-1 | ohm | 1E+013 |
| Comparative tracking index | Solution A | IEC 60112 | V | 600 |
| CTI performance level category | | Sol A | | PLC 0 |

Burning behaviour

| | | | | |
|-------------------------------------|---------|-----------|--|--------------|
| Flammability, 0.75 mm | 0.75 mm | UL 94 | | HB |
| 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), valid for natural colored products.
: 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 - 260 °C |
| Recommended mould temperature | 80 - 90 °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.