

TECHNICAL DATA SHEET

TECHNYL C 219 V30 WT 1175

(Previously DOMAMID 6G30H1 WT91175)

Polyamide 6, 30% glass fiber reinforced, heat-aging stabilized, for injection molding

General

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

Product identification

| | |
|-----------------------|----------------------|
| ISO 1043 abbreviation | PA6,GF30 |
| ISO 16396 designation | PA6,GF30,M1H,S14-100 |

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

Physical properties

| Condition | Standard | Unit | Value |
|-----------------------------|-----------------|-------------------|-----------|
| Density | ISO 1183 | g/cm ³ | 1.41 |
| Molding shrinkage, parallel | ISO 294-4, 2577 | % | 0.3 - 0.4 |
| Molding shrinkage, normal | ISO 294-4, 2577 | % | 0.9 - 1 |

Mechanical properties

| Condition | Standard | Unit | Value | |
|-------------------------------------|----------|--------------|-------------------|-----------|
| Tensile modulus | 1 mm/min | ISO 527-1/-2 | MPa | 10000 / - |
| Stress at break | | ISO 527-1/-2 | MPa | 135 / - |
| Strain at break | | ISO 527-1/-2 | % | 2.5 / - |
| Flexural modulus, ISO 178 | 2 mm/min | ISO 178 | MPa | 8500 / - |
| Flexural strength, ISO 178 | 2 mm/min | ISO 178 | MPa | 225 / - |
| Charpy impact strength, +23°C | +23°C | ISO 179/1eU | kJ/m ² | 65 / - |
| Charpy notched impact strength | | ISO 179/1eA | kJ/m ² | 9.5 / - |
| Izod impact strength, +23°C | +23°C | ISO 180/1U | kJ/m ² | 60 / - |
| Izod notched impact strength, +23°C | +23°C | ISO 180/1A | kJ/m ² | 9.5 / - |

| | Condition | Standard | Unit | Value |
|--|--------------|-------------|------|-------|
| 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 | 219 |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa | ISO 75 | °C | 205 |
| Vicat softening temperature | 50°C/h - 50N | ISO 306 | °C | 212 |

Burning behaviour

| | | | | |
|-------------------------------------|--------|-----------|--|--------------|
| Flammability, 1.5 mm | 1.5 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).
: 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 | 260 - 290 °C |
| Recommended mould temperature | 60 - 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.

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