

TECHNICAL DATA SHEET

TECHNYL A 218G V30 BK 21N

DOMAMID 66G30HR2 BK

Polyamide 66, 30% glass fiber reinforced, hydrolysis stabilized, for injection moulding, black. This product is available only in Asia and US

General

| | | |
|-----------------------|---|-----------------------|
| Certifications | RoHS | EC 1907/2006 (REACH) |
| Polymer type | PA66 | |
| Feature | heat-aging stabilized glycol resistant | hydrolysis stabilized |
| Colors available | black | |
| Forms | pellets | |
| Processing technology | injection moulding | |

Product identification

| | |
|-----------------------|-----------------------|
| ISO 1043 abbreviation | PA66-GF30 |
| ISO 16396 designation | PA66,GF30,MHW,S14-100 |

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

Physical properties

| Condition | Standard | Unit | Value | |
|------------------------------|-----------------------------|-------------------|--------------------|-----------|
| Density | ISO 1183 | g/cm ³ | 1.37 | |
| Humidity absorption | T=23 ^o C, 50% RH | ISO 62 | % | 2.2 - 2.4 |
| Water absorption | 24 hr, 23 ^o C | ISO 62 | % | 0.8 |
| Water absorption, saturation | | | % | 5.3 |
| Molding shrinkage, parallel | ISO 294-4, 2577 | % | | 0.2 - 0.4 |
| Molding shrinkage, normal | ISO 294-4, 2577 | % | | 0.7 - 0.9 |
| Viscosity number | 96% H2SO4 | ISO 307 | cm ³ /g | 145.0 |

| | Condition | Standard | Unit | Value |
|------------------------------|-----------|--------------|------|---------------------|
| Mechanical properties | | | | dam / cond.* |
| Tensile modulus | 1 mm/min | ISO 527-1/-2 | MPa | 10100 / 6900 |
| Stress at break | 5 mm/min | ISO 527-1/-2 | MPa | 190 / 120 |
| Strain at break | 5 mm/min | ISO 527-1/-2 | % | 3 / 5 |
| Flexural modulus, ISO 178 | 2 mm/min | ISO 178 | MPa | 8000 / 5300 |

*: **conditioned according to ISO 1110**

| | Condition | Standard | Unit | Value |
|--|-----------|----------|------|-------|
| Thermal properties | | | | |
| Temp. of deflection under load, 0.45 MPa | 0.45 MPa | ISO 75 | °C | 250 |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa | ISO 75 | °C | 250 |

| | Condition | Standard | Unit | Value |
|-------------------------------------|-----------|-----------|------|--------------|
| Burning behaviour | | | | |
| Burning rate, FMVSS, Thickness 1 mm | | FMVSS 302 | | < 100 mm/min |

| | Condition | Standard | Unit | Value |
|-------------------------------|---|----------|------|-------|
| Processing conditions | | | | |
| Drying temperature/time | 75-85°C / 2-4h (with dew point of dried air < -30 °C) | | | |
| Suggested max moisture | 0.2 % | | | |
| Rear temperature | 280 °C | | | |
| Middle temperature | 285 °C | | | |
| Front temperature | 290 °C | | | |
| Recommended melt temperature | 290 °C | | | |
| Recommended mould temperature | 110 °C | | | |

Injection notes

The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h.

TECHNYL®

DOMO
caring is our formula

TECHNICAL DATA SHEET

TECHNYL A 218G V30 BK 21N

Injection advice

For reinforced polyamides, Domo recommends the use of steel with a high content of carbon, and purified for polishing, to avoid or limit the abrasion. For example: X38CrMoV5-1 (EN Norm) - 1.2367 /1.2343 (DIN Norm) or X160CrMoV12 (EN Norm) - 1.2601 /1.2379 (DIN Norm). In the case of high requirements on surface quality a mould temperature of up to 120Å°C can be considered.,The processing parameters like processing temperatures are a recommendation and can be adjusted in function of injection machine size, part geometry / design.