

TECHNICAL DATA SHEET

TECHNYL C 216 V40 NC  
(Previously DOMAMID 6LVG40 300 NC)

Polyamide 6, 40% glass fiber reinforced, improved flowability, for injection moulding, natural color

General

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

Product identification

|                       |                     |
|-----------------------|---------------------|
| ISO 1043 abbreviation | PA6-GF40            |
| ISO 16396 designation | PA6,GF40,M1,S12-120 |

|                                    | Condition  | Standard        | Unit                    | Value     |
|------------------------------------|------------|-----------------|-------------------------|-----------|
| Physical properties                |            |                 |                         |           |
| Density                            |            | ISO 1183        | g/cm <sup>3</sup>       | 1.45      |
| Molding shrinkage, parallel        |            | ISO 294-4, 2577 | %                       | 0.2 - 0.4 |
| Molding shrinkage, normal          |            | ISO 294-4, 2577 | %                       | 0.8 - 1   |
| Melt volume-flow rate, MVR, 5.0 kg | 275°C, 5kg | ISO 1133        | cm <sup>3</sup> /10 min | 45        |
| Viscosity number                   | 96% H2SO4  | ISO 307         | cm <sup>3</sup> /g      | 125       |

|                                       |          |              |                   |              |
|---------------------------------------|----------|--------------|-------------------|--------------|
| Mechanical properties                 |          |              |                   | dam / cond.* |
| Tensile modulus                       | 1 mm/min | ISO 527-1/-2 | MPa               | 12000 / -    |
| Stress at break                       | 5 mm/min | ISO 527-1/-2 | MPa               | 200 / -      |
| Strain at break                       | 5 mm/min | ISO 527-1/-2 | %                 | 3 / -        |
| Flexural modulus, ISO 178             | 2 mm/min | ISO 178      | MPa               | 10000 / -    |
| Charpy impact strength, +23°C         | +23°C    | ISO 179/1eU  | kJ/m <sup>2</sup> | 100 / -      |
| Charpy notched impact strength, +23°C | +23°C    | ISO 179/1eA  | kJ/m <sup>2</sup> | 15 / -       |

|                                          |          |             |    |     |
|------------------------------------------|----------|-------------|----|-----|
| 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 | 215 |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa | ISO 75      | °C | 210 |

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

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  | 250 - 290 °C                                          |
| Recommended mould temperature | 80 - 100 °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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