

TECHNICAL DATA SHEET

TECHNYL C 236L1 V15 BK

(Previously DOMAMID 6G15UV1 500)

Polyamide 6, 15% glass fiber reinforced, UV-stabilized, improved impact resistance, for injection moulding

General

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

Product identification

|                       |                         |
|-----------------------|-------------------------|
| ISO 1043 abbreviation | PA6-I-GF15              |
| ISO 16396 designation | PA6-I,GF15,M1L1,S14-060 |

|                             | Condition | Standard        | Unit              | Value     |
|-----------------------------|-----------|-----------------|-------------------|-----------|
| Physical properties         |           |                 |                   |           |
| Density                     |           | ISO 1183        | g/cm <sup>3</sup> | 1.22      |
| Molding shrinkage, parallel |           | ISO 294-4, 2577 | %                 | 0.4 - 0.6 |
| Molding shrinkage, normal   |           | ISO 294-4, 2577 | %                 | 0.8 - 1   |

|                                       |          |              |                   |              |
|---------------------------------------|----------|--------------|-------------------|--------------|
| Mechanical properties                 |          |              |                   | dam / cond.* |
| Tensile modulus                       | 1 mm/min | ISO 527-1/-2 | MPa               | 5700 / -     |
| Stress at break                       | 5 mm/min | ISO 527-1/-2 | MPa               | 115 / -      |
| Strain at break                       | 5 mm/min | ISO 527-1/-2 | %                 | 3.5 / -      |
| Flexural modulus, ISO 178             | 2 mm/min | ISO 178      | MPa               | 5000 / -     |
| Flexural strength, ISO 178            | 2 mm/min | ISO 178      | MPa               | 185 / -      |
| Charpy impact strength, +23°C         | +23°C    | ISO 179/1eU  | kJ/m <sup>2</sup> | 55 / -       |
| Charpy notched impact strength, +23°C | +23°C    | ISO 179/1eA  | kJ/m <sup>2</sup> | 10 / -       |
| Izod impact strength, +23°C           | +23°C    | ISO 180/1U   | kJ/m <sup>2</sup> | 50 / -       |
| Izod notched impact strength, +23°C   | +23°C    | ISO 180/1A   | kJ/m <sup>2</sup> | 10 / -       |

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|                                          | 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   | 215   |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa     | ISO 75      | °C   | 190   |
| Vicat softening temperature              | 50°C/h - 50N | ISO 306     | °C   | 210   |

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     | 500    |
| CTI performance level category |            | Sol A         |       | PLC 1  |

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.

Disclaimer

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