

**TECHNICAL DATA SHEET**

**TECHNYL SLIDE C 216 Y10 NC**

(Previously DOMAMID L 6Y10)

Unreinforced polyamide 6, self lubricating, containing molybdenum disulfide, for injection moulding

**General**

|                       |                                  |                      |
|-----------------------|----------------------------------|----------------------|
| Feature               | Improved tribological properties | Low friction         |
| Polymer type          | PA6 (Polyamide 6)                |                      |
| Processing technology | Injection molding                |                      |
| Certification         | RoHS                             | EC 1907/2006 (REACH) |
| Colors available      | Natural                          |                      |
| Forms                 | Pellets                          |                      |

**Product identification**

|                       |                |
|-----------------------|----------------|
| ISO 1043 abbreviation | PA6            |
| ISO 16396 designation | PA6,M1,S14-030 |

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

**Physical properties**

|                             |                                    |                 |                    |           |
|-----------------------------|------------------------------------|-----------------|--------------------|-----------|
| Density                     |                                    | ISO 1183        | g/cm <sup>3</sup>  | 1.14      |
| Molding shrinkage, parallel |                                    | ISO 294-4, 2577 | %                  | 1.2 - 1.4 |
| Viscosity number            | 96% H <sub>2</sub> SO <sub>4</sub> | ISO 307         | cm <sup>3</sup> /g | 145       |

**Mechanical properties**

dam / cond.\*

|                                     |           |              |                   |          |
|-------------------------------------|-----------|--------------|-------------------|----------|
| Tensile modulus                     | 1 mm/min  | ISO 527-1/-2 | MPa               | 3200 / - |
| Strain at break                     | 50 mm/min | ISO 527-1/-2 | %                 | 30 / -   |
| Yield stress                        | 50 mm/min | ISO 527-1/-2 | MPa               | 90 / -   |
| Izod notched impact strength, +23°C | +23°C     | ISO 180/1A   | kJ/m <sup>2</sup> | 5 / -    |
| Rockwell hardness                   |           | ISO 2039/2   | ScaleR            | 110 / -  |

**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 | 185 |
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa     | ISO 75      | °C | 85  |
| Vicat softening temperature              | 50°C/h - 50N | ISO 306     | °C | 205 |

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**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           |
| Glow-wire flammability index, GWFI  | 1-3 mm  | IEC 60695-2-12 | °C | 650          |
| 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  | 230 - 260 °C  |
| Recommended mould temperature | 40 - 80 °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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