+135-3858-6433 (GuangDong) +188-1699-6168 (ShangHai) +852-6957-5415 (HongKong)

# TECHNYL® MAX High stiffness & strength



**TECHNICAL DATA SHEET** 

# **TECHNYL MAX A 219 XV50 BR 8065**

(Previously DOMAMID XS 66V50H1 BW88065)

Polyamide 66, 50% glass fiber reinforced, heat-aging stabilized, for injection moulding

### **General**

| Feature               | Heat-aging stabilized |                      |
|-----------------------|-----------------------|----------------------|
| Polymer type          | PA66 (Polyamide 66)   |                      |
| Processing technology | Injection molding     |                      |
| Certification         | RoHS                  | EC 1907/2006 (REACH) |
| Colors available      | Black                 | Grey                 |
| Forms                 | Pellets               |                      |

#### **Product identification**

| ISO 1043 abbreviation | PA66-GF50             |
|-----------------------|-----------------------|
| ISO 16396 designation | PA66,GF50,M1H,S14-190 |

| Physical properties |                |          |       |      |
|---------------------|----------------|----------|-------|------|
| Density             |                | ISO 1183 | g/cm³ | 1.59 |
| Humidity absorption | T=23°C, 50% RH | ISO 62   | %     | 1.4  |
| Water absorption    | 24 hr, 23°C    | ISO 62   | %     | 4    |

| Mechanical properties                 |          |              |       | dam / cond.* |
|---------------------------------------|----------|--------------|-------|--------------|
| Tensile modulus                       | 1 mm/min | ISO 527-1/-2 | MPa   | 17000 / -    |
| 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   | 15000 / -    |
| Flexural strength, ISO 178            | 2 mm/min | ISO 178      | MPa   | 275 / -      |
| Charpy impact strength, +23°C         | +23°C    | ISO 179/1eU  | kJ/m² | 50 / -       |
| Charpy notched impact strength, +23°C | +23°C    | ISO 179/1eA  | kJ/m² | 10 / -       |

# **Thermal properties**

| Melting temperature, 10°C/min            |          | ISO 11357-1 | °C | 262 |
|--|----------|-------------|----|-----|
| Temp. of deflection under load, 1.80 MPa | 1.80 MPa | ISO 75      | °C | 245 |

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Page 1

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| TECHNICAL DATA SHEET                |           | TECHNYL MAX A 219 XV50 BR 80 |       |            |
|-------------------------------------|-----------|------------------------------|-------|------------|
|                                     | Condition |                              |       |            |
| Electrical properties               |           |                              |       |            |
| Volume resistivity                  |           | IEC 62631-3-1                | ohm.m | 1000000000 |
| Burning behaviour                   |           |                              |       |            |
| Flammability, 0.75 mm               | 0.75 mm   | UL 94                        |       | НВ         |
| Burning rate, FMVSS, Thickness 1 mm |           | FMVSS 302                    |       | <100       |

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  | 280 - 305 °C  |  |
| Recommended mould temperature | 70 - 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.

### **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.

# **Disclaimer**

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