

## Technical Data Sheet

### RW *Schulamid* 66/6 MT 20 K1849 TITANGRAU

Polyamide 66/6 Copolymer

#### Product Description

20% talc filled and impact modified Polyamide 66/6

**Processing Method** Injection Molding

**Attribute** Good Stiffness; Medium Viscosity; Oil Resistant; Wear Resistant

**Filler/Reinforcement** Talc, 20%

| Typical Properties                                                  | Nominal Value | Units             | Test Method |
|---------------------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                                     |               |                   |             |
| Density, (Method A)                                                 | 1.28          | g/cm <sup>3</sup> | ISO 1183    |
| <b>Mechanical</b>                                                   |               |                   |             |
| Tensile Stress at Yield                                             |               |                   |             |
| (Type 1A, 50 mm/min)                                                | 50.0          | MPa               | ISO 527-2   |
| (Type 1A, 50 mm/min) - Conditioned                                  | 33.0          | MPa               | ISO 527-2   |
| Tensile Strain at Yield                                             |               |                   |             |
| (Type 1A, 50 mm/min)                                                | 3.5           | %                 | ISO 527-2   |
| (Type 1A, 50 mm/min) - Conditioned                                  | 27            | %                 | ISO 527-2   |
| Tensile Modulus                                                     |               |                   |             |
| (1 mm/min, Type 1A)                                                 | 3700          | MPa               | ISO 527-1   |
| (1 mm/min, Type 1A) - Conditioned                                   | 1500          | MPa               | ISO 527-1   |
| <b>Impact</b>                                                       |               |                   |             |
| Charpy Impact Strength - Notched                                    |               |                   |             |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 12            | kJ/m <sup>2</sup> | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 9.0           | kJ/m <sup>2</sup> | ISO 179     |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned                    | 20            | kJ/m <sup>2</sup> | ISO 179     |
| Charpy Impact Strength - Unnotched                                  |               |                   |             |
| (23 °C, Type 1, Edgewise)                                           | No Break      |                   | ISO 179     |
| (-30 °C, Type 1, Edgewise)                                          | No Break      |                   | ISO 179     |
| (23 °C, Type 1, Edgewise) - Conditioned                             | No Break      |                   | ISO 179     |
| <b>Thermal</b>                                                      |               |                   |             |
| Vicat Softening Temperature                                         |               |                   |             |
| (B (50N), 50 °C/h)                                                  | 175           | °C                | ISO 306     |
| (A (10N), 50 °C/h)                                                  | 220           | °C                | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 180           | °C                | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 65.0          | °C                | ISO 75-2/A  |
| <b>Electrical</b>                                                   |               |                   |             |

|                     |          |       |               |
|---------------------|----------|-------|---------------|
| Volume Resistivity  | >1.0E+13 | ohm*m | IEC 62631-3-1 |
| - Conditioned       | >1.0E+10 | ohm*m | IEC 62631-3-1 |
| Surface Resistivity | >1.0E+15 | ohm   | IEC 60093     |
| - Conditioned       | >1.0E+12 | ohm   | IEC 60093     |

#### Flammable

|              |      |        |           |
|--------------|------|--------|-----------|
| Burning Rate |      |        |           |
| (2.00 mm)    | <100 | mm/min | FMVSS 302 |
| (2.00 mm)    | <100 | mm/min | ISO 3795  |

#### Additional Information

|                           |     |   |        |
|---------------------------|-----|---|--------|
| Water Absorption 23C/50RH | 1.4 | % | ISO 62 |
|---------------------------|-----|---|--------|

#### UL Information

|                             |    |  |                      |
|-----------------------------|----|--|----------------------|
| Flammability Classification |    |  |                      |
| (1.5 mm)                    | HB |  | IEC 60695-11-10, -20 |
| (3.0 mm)                    | HB |  | IEC 60695-11-10, -20 |

| Injection Parameters   |  | Nominal Value | Units |
|------------------------|--|---------------|-------|
| Drying Time            |  | 2.0 to 4.0    | hr    |
| Drying Temperature     |  | 80            | °C    |
| Suggested Max Moisture |  | 0.040 to 0.10 | %     |
| Processing (Melt) Temp |  | 270 to 300    | °C    |
| Mold Temperature       |  | 70 to 100     | °C    |