

## Technical Data Sheet

### Schulamid SAM 66 MV HI TST TOL BLK968001



Polyamide 66

#### Product Description

Higher impact Polyamide 66 with recycled material

**Processing Method** Injection Molding

**Attribute** Low Temperature Impact Resistance; Medium Viscosity; Oil Resistant; Ultra High Impact Resistance; Ultra High Toughness

| Typical Properties                                                  | Nominal Value | Units             | Test Method |
|---------------------------------------------------------------------|---------------|-------------------|-------------|
| <b>Physical</b>                                                     |               |                   |             |
| Density, (Method A)                                                 | 1.06          | g/cm <sup>3</sup> | ISO 1183    |
| <b>Mechanical</b>                                                   |               |                   |             |
| Tensile Stress at Yield                                             |               |                   |             |
| (Type 1A, 50 mm/min)                                                | 42.0          | MPa               | ISO 527-2   |
| (Type 1A, 50 mm/min) - Conditioned                                  | 28.0          | MPa               | ISO 527-2   |
| Tensile Strain at Yield                                             |               |                   |             |
| (Type 1A, 50 mm/min)                                                | 10            | %                 | ISO 527-2   |
| (Type 1A, 50 mm/min) - Conditioned                                  | 30            | %                 | ISO 527-2   |
| Tensile Modulus                                                     |               |                   |             |
| (1 mm/min, Type 1A)                                                 | 1650          | MPa               | ISO 527-1   |
| (1 mm/min, Type 1A) - Conditioned                                   | 600           | MPa               | ISO 527-1   |
| <b>Impact</b>                                                       |               |                   |             |
| Charpy Impact Strength - Notched                                    |               |                   |             |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 35            | kJ/m <sup>2</sup> | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 20            | kJ/m <sup>2</sup> | ISO 179     |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned                    | No Break      |                   | 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)                                                  | 136           | °C                | ISO 306     |
| (A (10N), 50 °C/h)                                                  | 230           | °C                | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 82.0          | °C                | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 50.0          | °C                | ISO 75-2/A  |
| <b>Flammable</b>                                                    |               |                   |             |
| Burning Rate                                                        | <100          | mm/min            | ISO 3795    |
| <b>Additional Information</b>                                       |               |                   |             |
| Water Absorption 23C/50RH                                           | 2.1           | %                 | ISO 62      |