

## Technical Data Sheet

### Schulamid XM GF 35 BLK



Polyamide 66 + PA 6I/6T

#### Product Description

35% glassfiber reinforced semi-aromatic Polyamide Compound with excellent rigity and strength, also if conditioned.

|                      |                   |
|----------------------|-------------------|
| Processing Method    | Injection Molding |
| Filler/Reinforcement | Glass Fiber, 35%  |
| Resin ID             | PA 66 + PA 6I/6T  |

| Typical Properties                                      | Nominal Value | Units             | Test Method   |
|---------------------------------------------------------|---------------|-------------------|---------------|
| <b>Physical</b>                                         |               |                   |               |
| Density, (Method A)                                     | 1.43          | g/cm <sup>3</sup> | ISO 1183      |
| <b>Mechanical</b>                                       |               |                   |               |
| Tensile Strain at Break                                 |               |                   |               |
| (5 mm/min)                                              | 2.4           | %                 | ISO 527-2     |
| (5 mm/min) - Conditioned                                | 2.8           | %                 | ISO 527-2     |
| Flexural Modulus                                        | 9800          | MPa               | ISO 178       |
| Tensile Stress at Break                                 |               |                   |               |
| (5 mm/min)                                              | 190           | MPa               | ISO 527-2     |
| (5 mm/min) - Conditioned                                | 160           | MPa               | ISO 527-2     |
| Tensile Modulus                                         |               |                   |               |
| (1 mm/min)                                              | 10800         | MPa               | ISO 527-1     |
| (1 mm/min) - Conditioned                                | 10200         | MPa               | ISO 527-1     |
| Flexural Stress, (2.0 mm/min)                           | 270           | MPa               | ISO 178       |
| <b>Impact</b>                                           |               |                   |               |
| Charpy Impact Strength - Notched                        |               |                   |               |
| (23 °C, Type 1, Edgewise, Notch A)                      | 9.8           | kJ/m <sup>2</sup> | ISO 179       |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned        | 11            | kJ/m <sup>2</sup> | ISO 179       |
| (-30 °C, Type 1, Edgewise, Notch C)                     | 8.8           | kJ/m <sup>2</sup> | ISO 179       |
| Charpy Impact Strength - Unnotched                      |               |                   |               |
| (23 °C, Type 1, Edgewise)                               | 70            | kJ/m <sup>2</sup> | ISO 179       |
| (-30 °C, Type 1, Edgewise)                              | 60            | kJ/m <sup>2</sup> | ISO 179       |
| (23 °C, Type 1, Edgewise) - Conditioned                 | 70            | kJ/m <sup>2</sup> | ISO 179       |
| <b>Thermal</b>                                          |               |                   |               |
| Deflection Temperature Under Load Unannealed (1.80 MPa) | 230           | °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 |

|                                                |          |     |           |
|------------------------------------------------|----------|-----|-----------|
| Comparative Tracking Index (CTI), (Solution A) | 600      | V   | IEC 60112 |
| 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 | 1.0 to 1.5 | % | 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            | 3.0 to 6.0    | hr    |
| Drying Temperature     | 80            | °C    |
| Suggested Max Moisture | 0.040 to 0.10 | %     |
| Processing (Melt) Temp | 280 to 300    | °C    |
| Mold Temperature       | 80 to 120     | °C    |