

## Technical Data Sheet

### Schulblend M/MW 5201 MT SF U BLK71735



Acrylonitrile Styrene Acrylate + PA

#### Product Description

Nanocomposite based on ASA/PA6 blend with good dimensional stability, high flow, UV stabilized. (Former name: M/MW NC100 SF K2083)

**Processing Method** Injection Molding

**Resin ID** ASA+PA

| Typical Properties                                                  | Nominal Value | Units                   | Test Method   |
|---------------------------------------------------------------------|---------------|-------------------------|---------------|
| <b>Physical</b>                                                     |               |                         |               |
| Melt Volume Flow Rate, (250 °C/5.0 kg)                              | 10            | cm <sup>3</sup> /10 min | ISO 1133      |
| Density, (Method A)                                                 | 1.17          | g/cm <sup>3</sup>       | ISO 1183      |
| <b>Mechanical</b>                                                   |               |                         |               |
| Flexural Strain at Flexural Strength                                | 5.1           | %                       | ISO 178       |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                       | 55.0          | MPa                     | ISO 527-2     |
| Nominal Tensile Strain at Break, (50 mm/min, Type 1A)               | 25            | %                       | ISO 527-2     |
| Flexural Modulus, (2.0 mm/min)                                      | 3000          | MPa                     | ISO 178       |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.2           | %                       | ISO 527-2     |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 3200          | MPa                     | ISO 527-1     |
| Flexural Stress, (2.0 mm/min)                                       | 75.6          | MPa                     | ISO 178       |
| <b>Impact</b>                                                       |               |                         |               |
| Charpy Impact Strength - Notched                                    |               |                         |               |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 10            | kJ/m <sup>2</sup>       | ISO 179       |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 10            | 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       |
| <b>Thermal</b>                                                      |               |                         |               |
| Vicat Softening Temperature                                         |               |                         |               |
| (B (50N), 50 °C/h)                                                  | 115           | °C                      | ISO 306       |
| (A (10N), 50 °C/h)                                                  | 205           | °C                      | ISO 306       |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 105           | °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 |
| Surface Resistivity                                                 | >1.0E+15      | ohm                     | IEC 60093     |
| <b>Flammable</b>                                                    |               |                         |               |

|                             |    |        |                      |
|-----------------------------|----|--------|----------------------|
| Burning Rate                |    |        |                      |
| (2.00 mm)                   | 30 | mm/min | ISO 3795             |
| (2.00 mm)                   | 30 | mm/min | FMVSS 302            |
| 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            | 4             | hr    |
| Drying Temperature     | 80            | °C    |
| Suggested Max Moisture | 0.040 to 0.10 | %     |
| Processing (Melt) Temp | 230 to 270    | °C    |
| Mold Temperature       | 40 to 80      | °C    |