

## Technical Data Sheet

### Schulblend M/MW 6101 MT SF U BLK 71255



Acrylonitrile Styrene Acrylate + PA

#### Product Description

Nanocomposite filled PA/ASA 6-blend with increased dimensional stability, high flow, improved heat performance and UV stabilized. (Former name: M/MW NC 100 SF UV)

**Processing Method** Injection Molding

| Typical Properties                                                  | Nominal Value | Units                   | Test Method   |
|---------------------------------------------------------------------|---------------|-------------------------|---------------|
| <b>Physical</b>                                                     |               |                         |               |
| Melt Volume Flow Rate, (250 °C/5.0 kg)                              | 25            | cm <sup>3</sup> /10 min | ISO 1133      |
| Density, (Method A)                                                 | 1.19          | g/cm <sup>3</sup>       | ISO 1183      |
| <b>Mechanical</b>                                                   |               |                         |               |
| Tensile Stress at Yield                                             |               |                         |               |
| (Type 1A, 50 mm/min)                                                | 51.0          | MPa                     | ISO 527-2     |
| (Type 1A, 50 mm/min) - Conditioned                                  | 32.0          | MPa                     | ISO 527-2     |
| Tensile Strain at Yield                                             |               |                         |               |
| (Type 1A, 50 mm/min)                                                | 3.7           | %                       | ISO 527-2     |
| (Type 1A, 50 mm/min) - Conditioned                                  | 16            | %                       | ISO 527-2     |
| Tensile Modulus                                                     |               |                         |               |
| (1 mm/min, Type 1A)                                                 | 3100          | MPa                     | ISO 527-1     |
| (1 mm/min, Type 1A) - Conditioned                                   | 1400          | MPa                     | ISO 527-1     |
| <b>Impact</b>                                                       |               |                         |               |
| Charpy Impact Strength - Notched                                    |               |                         |               |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 22            | kJ/m <sup>2</sup>       | ISO 179       |
| (23 °C, Type 1, Edgewise, Notch A) - Conditioned                    | 110           | kJ/m <sup>2</sup>       | ISO 179       |
| Charpy Impact Strength - Unnotched                                  |               |                         |               |
| (23 °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)                                                  | 139           | °C                      | ISO 306       |
| (A (10N), 50 °C/h)                                                  | 208           | °C                      | ISO 306       |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 95.0          | °C                      | ISO 75-2/B    |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 55.0          | °C                      | ISO 75-2/A    |
| <b>Electrical</b>                                                   |               |                         |               |
| Volume Resistivity                                                  | >1.0E+13      | ohm*m                   | IEC 62631-3-1 |
| - Conditioned                                                       | >1.0E+13      | ohm*m                   | IEC 62631-3-1 |

|                             |          |        |                      |
|-----------------------------|----------|--------|----------------------|
| Surface Resistivity         | >1.0E+15 | ohm    | IEC 60093            |
| - Conditioned               | >1.0E+15 | ohm    | IEC 60093            |
| <b>Flammable</b>            |          |        |                      |
| Burning Rate                |          |        |                      |
| (2.00 mm)                   | 40       | mm/min | ISO 3795             |
| (2.00 mm)                   | 40       | mm/min | FMVSS 302            |
| <b>UL Information</b>       |          |        |                      |
| Flammability Classification |          |        |                      |
| (1.6 mm)                    | HB       |        | IEC 60695-11-10, -20 |
| (1.6 mm) - Conditioned      | HB       |        | IEC 60695-11-10, -20 |

| <b>Injection Parameters</b> | <b>Nominal Value</b> | <b>Units</b> |
|-----------------------------|----------------------|--------------|
| Nozzle Temperature          | 260                  | °C           |
| Processing (Melt) Temp      | 230 to 260           | °C           |
| Front Temperature           | 250                  | °C           |
| Hopper Temperature          | 50                   | °C           |
| Middle Temperature          | 230 to 240           | °C           |
| Rear Temperature            | 220                  | °C           |
| Injection Rate              | Fast                 |              |
| Back Pressure               | 5.00 to 15.0         | MPa          |
| Mold Temperature            | 30 to 80             | °C           |
| Injection Pressure          | 100 to 150           | MPa          |
| Cushion                     | 2.00 to 5.00         | mm           |