

## Technical Data Sheet

### *Schulblend* M/MW NC100 SF K2083 NAT



Acrylonitrile Styrene Acrylate + PA

#### Product Description

Nanocomposite based on ASA/PA 6-blend with increased dimensional stability, high flow, UV stabilized

**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)                               | 20            | 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)                        | 50.5          | 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)                        | 2.8           | %                       | ISO 527-2   |
| Tensile Stress at Break, (Type 1A, 50 mm/min)                        | 48.0          | MPa                     | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                 | 3240          | 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     |
| Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)        | 38            | kJ/m <sup>2</sup>       | ISO 179     |
| <b>Thermal</b>                                                       |               |                         |             |
| Vicat Softening Temperature, (B (50N), 50 °C/h)                      | 120           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise)  | 106           | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise)  | 70.0          | °C                      | ISO 75-2/A  |
| <b>Flammable</b>                                                     |               |                         |             |
| Burning Rate, (2.00 mm)                                              | <60           | mm/min                  | ISO 3795    |

| Injection Parameters   | Nominal Value | Units |
|------------------------|---------------|-------|
| Drying Time            | 4             | hr    |
| Drying Temperature     | 80            | °C    |
| Processing (Melt) Temp | 230 to 270    | °C    |
| Mold Temperature       | 40 to 80      | °C    |