

## Technical Data Sheet

### Schulablend(ABS/PA)M/MK7101 GF20 NAT



Acrylonitrile Butadiene Styrene + PA

#### Product Description

20% glass fibre reinforced ABS/PA blend. (Former name: SCHULABLEND M/MK GF20)

**Processing Method** Injection Molding

**Filler/Reinforcement** Glass Fiber, 20%

| Typical Properties                                                  | Nominal Value | Units                   | Test Method   |
|---------------------------------------------------------------------|---------------|-------------------------|---------------|
| <b>Physical</b>                                                     |               |                         |               |
| Melt Volume Flow Rate, (250 °C/5.0 kg)                              | 4.5           | cm <sup>3</sup> /10 min | ISO 1133      |
| Density, (Method A)                                                 | 1.21          | g/cm <sup>3</sup>       | ISO 1183      |
| <b>Mechanical</b>                                                   |               |                         |               |
| Tensile Strain at Break, (Type 1A, 5 mm/min)                        | 3.1           | %                       | ISO 527-2     |
| Tensile Stress at Break, (Type 1A, 5 mm/min)                        | 86.0          | MPa                     | ISO 527-2     |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 5200          | MPa                     | ISO 527-1     |
| <b>Impact</b>                                                       |               |                         |               |
| Charpy Impact Strength - Notched                                    |               |                         |               |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 9.0           | kJ/m <sup>2</sup>       | ISO 179       |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 7.0           | kJ/m <sup>2</sup>       | ISO 179       |
| Charpy Impact Strength - Unnotched                                  |               |                         |               |
| (23 °C, Type 1, Edgewise)                                           | 56            | kJ/m <sup>2</sup>       | ISO 179       |
| (-30 °C, Type 1, Edgewise)                                          | 55            | kJ/m <sup>2</sup>       | ISO 179       |
| <b>Hardness</b>                                                     |               |                         |               |
| Ball Indentation Hardness, (H 358/30)                               | 97.0          | MPa                     | ISO 2039-1    |
| <b>Thermal</b>                                                      |               |                         |               |
| Vicat Softening Temperature                                         |               |                         |               |
| (B (50N), 50 °C/h)                                                  | 157           | °C                      | ISO 306       |
| (A (10N), 50 °C/h)                                                  | 213           | °C                      | ISO 306       |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 202           | °C                      | ISO 75-2/B    |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 153           | °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)                                                           | <100          | mm/min                  | FMVSS 302     |
| (2.00 mm)                                                           | <100          | mm/min                  | ISO 3795      |

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**UL Information**

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**Flammability Classification**

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(1.5 mm)

HB

IEC 60695-11-10, -  
20

(3.0 mm)

HB

IEC 60695-11-10, -  
20**Injection Parameters**

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**Nominal****Value****Units**

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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