

## Technical Data Sheet

# RW *Schuladur* A NV12 NATURAL



Polybutylene Terephthalate

### Product Description

Low viscosity non-reinforced PBT compound

|                   |                   |
|-------------------|-------------------|
| Processing Method | Injection Molding |
| Attribute         | Good Flow         |
| Resin ID          | PBT               |

| Typical Properties                                                  | Nominal Value | Units                   | Test Method    |
|---------------------------------------------------------------------|---------------|-------------------------|----------------|
| <b>Physical</b>                                                     |               |                         |                |
| Melt Volume Flow Rate, (250 °C/2.16 kg)                             | 55            | cm <sup>3</sup> /10 min | ISO 1133       |
| Density, (Method A)                                                 | 1.31          | g/cm <sup>3</sup>       | ISO 1183       |
| <b>Mechanical</b>                                                   |               |                         |                |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                       | 55.0          | MPa                     | ISO 527-2      |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 4.0           | %                       | ISO 527-2      |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 2600          | MPa                     | ISO 527-1      |
| <b>Impact</b>                                                       |               |                         |                |
| Charpy Impact Strength - Notched                                    |               |                         |                |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 5.0           | kJ/m <sup>2</sup>       | ISO 179        |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 4.0           | kJ/m <sup>2</sup>       | ISO 179        |
| Charpy Impact Strength - Unnotched, (23 °C, Type 1, Edgewise)       | No Break      |                         | ISO 179        |
| <b>Thermal</b>                                                      |               |                         |                |
| Vicat Softening Temperature, (B (50N), 50 °C/h)                     | 177           | °C                      | ISO 306        |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 156           | °C                      | ISO 75-2/B     |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 58.0          | °C                      | ISO 75-2/A     |
| <b>Electrical</b>                                                   |               |                         |                |
| Volume Resistivity                                                  | >1.0E+13      | ohm*m                   | IEC 62631-3-1  |
| Comparative Tracking Index (CTI)                                    | 600           | V                       | IEC 60112      |
| 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       |
| Glow Wire Flammability Index                                        |               |                         |                |
| (1.5 mm)                                                            | 750           | °C                      | IEC 60695-2-12 |
| (3.0 mm)                                                            | 750           | °C                      | IEC 60695-2-12 |

|                               |        |                      |
|-------------------------------|--------|----------------------|
| <b>Additional Information</b> |        |                      |
| Water Absorption 23C/50RH     | 0.5 %  | ISO 62               |
| <b>UL Information</b>         |        |                      |
| Flammability Classification   |        |                      |
| (1.5 mm)                      | HB     | IEC 60695-11-10, -20 |
| (3.0 mm)                      | HB     | IEC 60695-11-10, -20 |
| UL File Number                | E86615 |                      |

| <b>Injection Parameters</b> | <b>Nominal</b> |              |
|-----------------------------|----------------|--------------|
|                             | <b>Value</b>   | <b>Units</b> |
| Drying Time                 | 2.0 to 4.0     | hr           |
| Drying Temperature          | 120            | °C           |
| Suggested Max Moisture      | 0.05           | %            |
| Processing (Melt) Temp      | 250 to 260     | °C           |
| Mold Temperature            | 70 to 90       | °C           |