

## Technical Data Sheet

### Ronfalin VE101 BLK 10007



Acrylonitrile Butadiene Styrene

#### Product Description

Flame retardant ABS for injection moulding.

**Processing Method** Injection Molding

**Additive** Flame Retardant

| Typical Properties                                                  | Nominal Value | Units                   | Test Method |
|---------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                     |               |                         |             |
| Melt Volume Flow Rate, (220 °C/10.0 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)                       | 45.0          | MPa                     | ISO 527-2   |
| Tensile Strain at Break                                             | 18            | %                       | ISO 527-2   |
| Flexural Modulus, (2.0 mm/min)                                      | 2700          | MPa                     | ISO 178     |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.0           | %                       | ISO 527-2   |
| Tensile Stress at Break, (Type 1A, 50 mm/min)                       | 40.0          | MPa                     | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 2500          | MPa                     | ISO 527-1   |
| Flexural Stress                                                     |               |                         |             |
| (2.0 mm/min, 3.5%)                                                  | 74.0          | MPa                     | ISO 178     |
| (2.0 mm/min, 4.2%)                                                  | 75.0          | MPa                     | ISO 178     |
| (2.0 mm/min, 8.5%)                                                  | 68.0          | MPa                     | ISO 178     |
| <b>Impact</b>                                                       |               |                         |             |
| Charpy Impact Strength - Notched                                    |               |                         |             |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 11            | kJ/m <sup>2</sup>       | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 6.0           | kJ/m <sup>2</sup>       | ISO 179     |
| Charpy Impact Strength - Unnotched                                  |               |                         |             |
| (23 °C, Type 1, Edgewise)                                           | 65            | kJ/m <sup>2</sup>       | ISO 179     |
| (-30 °C, Type 1, Edgewise)                                          | 45            | kJ/m <sup>2</sup>       | ISO 179     |
| <b>Thermal</b>                                                      |               |                         |             |
| Vicat Softening Temperature                                         |               |                         |             |
| (B (50N), 50 °C/h)                                                  | 93.0          | °C                      | ISO 306     |
| (A (10N), 50 °C/h)                                                  | 102           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 83.0          | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 75.0          | °C                      | ISO 75-2/A  |
| <b>Electrical</b>                                                   |               |                         |             |
| Comparative Tracking Index (CTI), (Solution A)                      | 350           | V                       | IEC 60112   |

## Flammable

|                                |     |    |                |
|--------------------------------|-----|----|----------------|
| Glow Wire Flammability Index   |     |    |                |
| (1.5 mm)                       | 960 | °C | IEC 60695-2-12 |
| (3.0 mm)                       | 960 | °C | IEC 60695-2-12 |
| Glow Wire Ignition Temperature |     |    |                |
| (1.5 mm)                       | 700 | °C | IEC 60695-2-13 |
| (3.0 mm)                       | 725 | °C | IEC 60695-2-13 |

## UL Information

|                             |     |  |                      |
|-----------------------------|-----|--|----------------------|
| Flammability Classification |     |  |                      |
| (0.8 mm)                    | V-0 |  | IEC 60695-11-10, -20 |
| (1.6 mm)                    | V-0 |  | IEC 60695-11-10, -20 |
| (3.2 mm)                    | V-0 |  | IEC 60695-11-10, -20 |