

## Technical Data Sheet

**Ronfalin ABS 1335 A U GRM 60475**

Acrylonitrile Butadiene Styrene

**Product Description**

General purpose ABS grade, antistatic

**Processing Method** Injection Molding**Attribute** Good Flow**Resin ID** ABS

| <b>Typical Properties</b>   | <b>Nominal Value</b> | <b>Units</b>            | <b>Test Method</b> |
|---|----------------------|-------------------------|--------------------|
| <b>Physical</b>   |                      |                         |                    |
| Melt Volume Flow Rate, (220 °C/10.0 kg)                             | 27                   | cm <sup>3</sup> /10 min | ISO 1133           |
| Density, (Method A)   | 1.05                 | g/cm <sup>3</sup>       | ISO 1183           |
| <b>Mechanical</b>   |                      |                         |                    |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                       | 50.0                 | MPa                     | ISO 527-2          |
| Nominal Tensile Strain at Break, (50 mm/min, Type 1A)               | 11                   | %                       | ISO 527-2          |
| Flexural Modulus, (2.0 mm/min)                                      | 2800                 | MPa                     | ISO 178            |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.1                  | %                       | 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)                                | 2600                 | MPa                     | ISO 527-1          |
| Flexural Stress, (2.0 mm/min, 4.8%)                                 | 82.0                 | MPa                     | ISO 178            |
| <b>Impact</b>   |                      |                         |                    |
| Charpy Impact Strength - Notched                                    |                      |                         |                    |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 17                   | kJ/m <sup>2</sup>       | ISO 179            |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 8.0                  | kJ/m <sup>2</sup>       | ISO 179            |
| Charpy Impact Strength - Unnotched                                  |                      |                         |                    |
| (23 °C, Type 1, Edgewise)   | No Break             |                         | ISO 179            |
| (-30 °C, Type 1, Edgewise)  | 69                   | kJ/m <sup>2</sup>       | ISO 179            |
| <b>Hardness</b>   |                      |                         |                    |
| Ball Indentation Hardness, (H 358/30)                               | 128                  | MPa                     | ISO 2039-1         |
| <b>Thermal</b>  |                      |                         |                    |
| Vicat Softening Temperature   |                      |                         |                    |
| (B (50N), 50 °C/h)  | 97.0                 | °C                      | ISO 306            |
| (A (10N), 50 °C/h)  | 104                  | °C                      | ISO 306            |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 92.0                 | °C                      | ISO 75-2/B         |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 84.0                 | °C                      | ISO 75-2/A         |
| <b>Electrical</b>   |                      |                         |                    |

|  |                    |       |               |
|--|--------------------|-------|---------------|
| Volume Resistivity                             | 1000000000<br>000  | ohm*m | IEC 62631-3-1 |
| Comparative Tracking Index (CTI), (Solution A) | 600                | V     | IEC 60112     |
| Surface Resistivity                            | 1000000000<br>0000 | ohm   | IEC 60093     |

**Flammable**

|                                       |      |        |                |
|---------------------------------------|------|--------|----------------|
| <b>Burning Rate</b>                   |      |        |                |
| (2.00 mm)                             | <100 | mm/min | ISO 3795       |
| (2.00 mm)                             | <100 | mm/min | FMVSS 302      |
| <b>Glow Wire Ignition Temperature</b> |      |        |                |
| (1.5 mm)                              | 700  | °C     | IEC 60695-2-13 |
| (3.0 mm)                              | 700  | °C     | IEC 60695-2-13 |

**UL Information**

|                                    |    |  |                      |
|------------------------------------|----|--|----------------------|
| <b>Flammability Classification</b> |    |  |                      |
| (1.6 mm)                           | HB |  | IEC 60695-11-10, -20 |
| (3.2 mm)                           | HB |  | IEC 60695-11-10, -20 |

| <b>Injection Parameters</b> | <b>Nominal Value</b> | <b>Units</b> |
|-----------------------------|----------------------|--------------|
| Drying Time                 | 2.0 to 4.0           | hr           |
| Drying Temperature          | 80                   | °C           |
| Processing (Melt) Temp      | 230 to 250           | °C           |
| Mold Temperature            | 40 to 80             | °C           |