

## Technical Data Sheet

### Ronfalin ABS 1337 U GRM 61680



Acrylonitrile Butadiene Styrene

#### Product Description

General purpose ABS Compound, high flow with UV stabilization. (Former name: POLYMAN ABS M/TK SF K1516)

**Processing Method** Injection Molding

**Attribute** Good Flow

**Resin ID** ABS

| Typical Properties                                                  | Nominal Value | Units                   | Test Method |
|---------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                     |               |                         |             |
| Melt Volume Flow Rate, (220 °C/10.0 kg)                             | 37            | cm <sup>3</sup> /10 min | ISO 1133    |
| Density, (Method A)                                                 | 1.04          | g/cm <sup>3</sup>       | ISO 1183    |
| <b>Mechanical</b>                                                   |               |                         |             |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                       | 48.0          | MPa                     | ISO 527-2   |
| Nominal Tensile Strain at Break, (50 mm/min, Type 1A)               | 16            | %                       | ISO 527-2   |
| Flexural Modulus, (2.0 mm/min)                                      | 2800          | MPa                     | ISO 178     |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.0           | %                       | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 2600          | MPa                     | ISO 527-1   |
| Flexural Stress, (2.0 mm/min, 4.8%)                                 | 79.0          | 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)                                          | 83            | kJ/m <sup>2</sup>       | ISO 179     |
| <b>Hardness</b>                                                     |               |                         |             |
| Ball Indentation Hardness, (H 358/30)                               | 120           | 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)                                                  | 103           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 91.0          | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 79.0          | °C                      | ISO 75-2/A  |
| <b>Electrical</b>                                                   |               |                         |             |

|                                                |            |                      |                      |
|------------------------------------------------|------------|----------------------|----------------------|
| Volume Resistivity                             | >1.0E+13   | ohm*m                | IEC 62631-3-1        |
| Comparative Tracking Index (CTI), (Solution A) | 600        | V                    | IEC 60112            |
| Surface Resistivity                            | >1.0E+15   | ohm                  | IEC 60093            |
| <b>Flammable</b>                               |            |                      |                      |
| Burning Rate                                   |            |                      |                      |
| (2.00 mm)                                      | <100       | mm/min               | ISO 3795             |
| (2.00 mm)                                      | <100       | mm/min               | FMVSS 302            |
| Glow Wire Ignition Temperature                 |            |                      |                      |
| (1.5 mm)                                       | 700        | °C                   | IEC 60695-2-13       |
| (3.0 mm)                                       | 700        | °C                   | IEC 60695-2-13       |
| <b>UL Information</b>                          |            |                      |                      |
| Flammability Classification                    |            |                      |                      |
| (1.5 mm)                                       | HB         |                      | IEC 60695-11-10, -20 |
| (3.0 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                   |                      |