

## Technical Data Sheet

### Ronfalin ASA 3422 U GRY 61415



Acrylonitrile Styrene Acrylate

#### Product Description

High flow ASA grade with enhanced UV stability. (Former name: POLYMAN ASA E/MI 1010 UV). Available in metallic colors.

**Processing Method** Extrusion; Injection Molding

**Attribute** High Flow; UV Resistant

| Typical Properties                                                  | Nominal Value | Units                   | Test Method   |
|---------------------------------------------------------------------|---------------|-------------------------|---------------|
| <b>Physical</b>                                                     |               |                         |               |
| Melt Volume Flow Rate, (220 °C/10.0 kg)                             | 14            | cm <sup>3</sup> /10 min | ISO 1133      |
| Density, (Method A)                                                 | 1.08          | 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)               | 5.0           | %                       | ISO 527-2     |
| Flexural Modulus, (2.0 mm/min)                                      | 2600          | MPa                     | ISO 178       |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.5           | %                       | ISO 527-2     |
| Tensile Stress at Break, (Type 1A, 50 mm/min)                       | 45.0          | MPa                     | ISO 527-2     |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 3000          | MPa                     | ISO 527-1     |
| Flexural Stress, (2.0 mm/min, 4.8%)                                 | 80.0          | MPa                     | ISO 178       |
| <b>Impact</b>                                                       |               |                         |               |
| Charpy Impact Strength - Notched                                    |               |                         |               |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 8.0           | kJ/m <sup>2</sup>       | ISO 179       |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 2.0           | kJ/m <sup>2</sup>       | ISO 179       |
| <b>Hardness</b>                                                     |               |                         |               |
| Ball Indentation Hardness, (H 358/30)                               | 96.0          | MPa                     | ISO 2039-1    |
| <b>Thermal</b>                                                      |               |                         |               |
| Vicat Softening Temperature, (B (50N), 50 °C/h)                     | 100           | °C                      | ISO 306       |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 90.0          | °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                  | ISO 3795      |
| (2.00 mm)                                                           | <100          | mm/min                  | FMVSS 302     |

#### UL Information

##### Flammability Classification

|          |    |                          |
|----------|----|--------------------------|
| (1.5 mm) | HB | IEC 60695-11-10, -<br>20 |
| (3.0 mm) | HB | IEC 60695-11-10, -<br>20 |

| Injection Parameters   | Nominal    |       |
|------------------------|------------|-------|
|                        | Value      | Units |
| Drying Time            | 2.0 to 4.0 | hr    |
| Drying Temperature     | 80         | °C    |
| Processing (Melt) Temp | 240 to 270 | °C    |
| Mold Temperature       | 40 to 80   | °C    |