

## Technical Data Sheet

### Polyman ASA M/MI 2010 GRY69250



Acrylonitrile Styrene Acrylate

#### Product Description

medium impact ASA grade with good weatherability for injection molding

**Processing Method** Injection Molding

**Resin ID** ASA

| Typical Properties                                                  | Nominal Value | Units                   | Test Method          |
|---------------------------------------------------------------------|---------------|-------------------------|----------------------|
| <b>Physical</b>                                                     |               |                         |                      |
| Melt Volume Flow Rate, (220 °C/10.0 kg)                             | 16            | 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)                       | 43.0          | MPa                     | ISO 527-2            |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.2           | %                       | ISO 527-2            |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 2000          | MPa                     | ISO 527-1            |
| <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)                                 | 4.0           | 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)                               | 87.0          | MPa                     | ISO 2039-1           |
| <b>Thermal</b>                                                      |               |                         |                      |
| Vicat Softening Temperature                                         |               |                         |                      |
| (B (50N), 50 °C/h)                                                  | 91.0          | °C                      | ISO 306              |
| (A (10N), 50 °C/h)                                                  | 103           | °C                      | ISO 306              |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 84.0          | °C                      | ISO 75-2/B           |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 72.0          | °C                      | ISO 75-2/A           |
| <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)                                                            | 675           | °C                      | IEC 60695-2-12       |
| (3.0 mm)                                                            | 675           | °C                      | IEC 60695-2-12       |
| 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 |