

## Technical Data Sheet

**Polyman ASA M/MI 2010 WHI80830**

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                  | ISO 3795       |
| (2.00 mm)                                                           | <100          | mm/min                  | FMVSS 302      |
| 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       |
| UL Information                 |     |    |                      |
| Flammability Classification    |     |    |                      |
| (1.5 mm)                       | HB  |    | IEC 60695-11-10, -20 |
| (3.0 mm)                       | HB  |    | IEC 60695-11-10, -20 |