

## Technical Data Sheet

### *Polyman* ABS M/AD NAT



Acrylonitrile Butadiene Styrene

#### Product Description

Good flowing ABS grade for self-colouring, for parts with matt surface finish

**Processing Method**      Injection Molding

| Typical Properties                                                  | Nominal Value | Units                   | Test Method |
|---------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                     |               |                         |             |
| Melt Volume Flow Rate, (220 °C/10.0 kg)                             | 8.0           | cm <sup>3</sup> /10 min | ISO 1133    |
| Density, (Method A)                                                 | 1.06          | g/cm <sup>3</sup>       | ISO 1183    |
| <b>Mechanical</b>                                                   |               |                         |             |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                       | 29.0          | MPa                     | ISO 527-2   |
| Nominal Tensile Strain at Break, (50 mm/min, Type 1A)               | 22            | %                       | ISO 527-2   |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.5           | %                       | ISO 527-2   |
| Tensile Stress at Break, (Type 1A, 50 mm/min)                       | 23.0          | MPa                     | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 1350          | MPa                     | ISO 527-1   |
| <b>Impact</b>                                                       |               |                         |             |
| Charpy Impact Strength - Notched                                    |               |                         |             |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 16            | kJ/m <sup>2</sup>       | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 10            | 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)                                          | No Break      |                         | ISO 179     |
| <b>Thermal</b>                                                      |               |                         |             |
| Vicat Softening Temperature                                         |               |                         |             |
| (B (50N), 50 °C/h)                                                  | 80.0          | °C                      | ISO 306     |
| (A (10N), 50 °C/h)                                                  | 108           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 82.0          | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 63.0          | °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   |