

Technical Data Sheet

Polyman ABS M/TK A LM BKR72645

Acrylonitrile Butadiene Styrene

Product Description

ABS standard grade with higher softening temperature

Processing Method Injection Molding**Resin ID** ABS

| Typical Properties | Nominal Value | Units | Test Method |
|---|----------------------|-------------------------|--------------------|
| Physical | | | |
| Melt Volume Flow Rate, (220 °C/10.0 kg) | 23 | cm ³ /10 min | ISO 1133 |
| Density, (Method A) | 1.05 | g/cm ³ | ISO 1183 |
| Mechanical | | | |
| Tensile Stress at Yield, (Type 1A, 50 mm/min) | 52.0 | MPa | ISO 527-2 |
| Tensile Strain at Yield, (Type 1A, 50 mm/min) | 2.5 | % | ISO 527-2 |
| Tensile Modulus, (1 mm/min, Type 1A) | 2500 | MPa | ISO 527-1 |
| Impact | | | |
| Charpy Impact Strength - Notched | | | |
| (23 °C, Type 1, Edgewise, Notch A) | 15 | kJ/m ² | ISO 179 |
| (-30 °C, Type 1, Edgewise, Notch A) | 7.0 | kJ/m ² | ISO 179 |
| Charpy Impact Strength - Unnotched | | | |
| (23 °C, Type 1, Edgewise) | No Break | | ISO 179 |
| (-30 °C, Type 1, Edgewise) | 80 | kJ/m ² | ISO 179 |
| Hardness | | | |
| Ball Indentation Hardness, (H 358/30) | 105 | MPa | ISO 2039-1 |
| Thermal | | | |
| Vicat Softening Temperature, (B (50N), 50 °C/h) | 98.0 | °C | ISO 306 |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 96.0 | °C | ISO 75-2/B |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 92.0 | °C | ISO 75-2/A |
| Electrical | | | |
| Volume Resistivity | >1.0E+13 | ohm*m | IEC 62631-3-1 |
| Surface Resistivity | >1.0E+15 | ohm | IEC 60093 |
| Flammable | | | |
| 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) | 650 °C | IEC 60695-2-12 |
| (3.0 mm) | 650 °C | IEC 60695-2-12 |
| UL Information | | |
| Flammability Classification | | |
| (1.5 mm) | HB | IEC 60695-11-10, -20 |
| (3.0 mm) | HB | IEC 60695-11-10, -20 |
| UL File Number | E86615 | |