

## Technical Data Sheet

### *Polyman* ABS M/MI A K1452 WHI80830



Acrylonitrile Butadiene Styrene

#### Product Description

Medium impact standard ABS grade, antistatic

#### Regulatory Status

For regulatory compliance information, see *Polyman* ABS M/MI A K1452 WHI80830 [Product Stewardship Bulletin \(PSB\)](#) and [Safety Data Sheet \(SDS\)](#).

|                          |                                                         |
|--------------------------|---------------------------------------------------------|
| <b>Status</b>            | Commercial: Active                                      |
| <b>Availability</b>      | Africa-Middle East; Asia-Pacific; Europe; Latin America |
| <b>Processing Method</b> | Injection Molding                                       |
| <b>Attribute</b>         | Medium Impact Resistance                                |
| <b>Additive</b>          | Antistatic                                              |
| <b>Resin ID</b>          | ABS                                                     |

| Typical Properties                                                  | Nominal Value | Units                   | Test Method |
|---------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                     |               |                         |             |
| Melt Volume Flow Rate, (220 °C/10.0 kg)                             | 25            | 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)                       | 50.0          | MPa                     | ISO 527-2   |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.0           | %                       | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 2600          | MPa                     | ISO 527-1   |
| <b>Impact</b>                                                       |               |                         |             |
| Charpy Impact Strength - Notched                                    |               |                         |             |
| (23 °C, Type 1, Edgewise, Notch A)                                  | 15            | kJ/m <sup>2</sup>       | ISO 179     |
| (-30 °C, Type 1, Edgewise, Notch A)                                 | 7.0           | kJ/m <sup>2</sup>       | ISO 179     |
| Charpy Impact Strength - Unnotched                                  |               |                         |             |
| (23 °C, Type 1, Edgewise)                                           | 91            | kJ/m <sup>2</sup>       | ISO 179     |
| (-30 °C, Type 1, Edgewise)                                          | 58            | kJ/m <sup>2</sup>       | ISO 179     |
| <b>Hardness</b>                                                     |               |                         |             |
| Ball Indentation Hardness, (H 358/30)                               | 120           | MPa                     | ISO 2039-1  |
| <b>Thermal</b>                                                      |               |                         |             |
| Vicat Softening Temperature                                         |               |                         |             |
| (B (50N), 50 °C/h)                                                  | 97.0          | °C                      | ISO 306     |
| (A (10N), 50 °C/h)                                                  | 103           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 88.0          | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 77.0          | °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 |
| UL File Number                 | E86615 |                      |

## Notes

These are typical property values not to be construed as specification limits.

## Processing Techniques

Specific recommendations for resin type and processing conditions can only be made when the end use, required properties and fabrication equipment are known.

## Company Information

For further information regarding the LyondellBasell company, please visit <http://www.lyb.com/>.

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