

# Altuglas® V 920

## Polymethyl Methacrylate Acrylic

### Altuglas International of Arkema Inc.

| General                               |                                              |                                           |                                          |
|---------------------------------------|----------------------------------------------|-------------------------------------------|------------------------------------------|
| Material Status                       | • Commercial: Active                         |                                           |                                          |
| Availability                          | • Asia Pacific                               | • Europe                                  |                                          |
| Additive                              | • Antiblock                                  | • Lubricant                               |                                          |
| Features                              | • Antiblocking                               | • Good UV Resistance                      | • Lubricated                             |
| Appearance                            | • Clear/Transparent                          |                                           |                                          |
| Forms                                 | • Granules                                   |                                           |                                          |
| Processing Method                     | • Injection Molding                          | • Thermoforming                           |                                          |
| Multi-Point Data                      | • Isothermal Stress vs. Strain (ISO 11403-1) | • Secant Modulus vs. Strain (ISO 11403-1) | • Viscosity vs. Shear Rate (ISO 11403-2) |
| Physical                              |                                              | Nominal Value Unit                        | Test Method                              |
| Density                               |                                              | 1180 kg/m <sup>3</sup>                    | ISO 1183 <sup>2</sup>                    |
| Melt volume-flow rate (230°C/3.8 kg)  |                                              | 7.00 cm <sup>3</sup> /10min               | ISO 1133 <sup>2</sup>                    |
| Water Absorption                      |                                              |                                           | ISO 62 <sup>2</sup>                      |
| Saturation                            |                                              | 1.9 %                                     |                                          |
| Equilibrium                           |                                              | 0.30 %                                    |                                          |
| Mechanical                            |                                              | Nominal Value Unit                        | Test Method                              |
| Tensile modulus                       |                                              | 3300 MPa                                  | ISO 527-2 <sup>2</sup>                   |
| Tensile Stress (Break)                |                                              | 69.0 MPa                                  | ISO 527-2 <sup>2</sup>                   |
| Tensile Strain (Break)                |                                              | 6.0 %                                     | ISO 527-2 <sup>2</sup>                   |
| Tensile Creep Modulus                 |                                              |                                           | ISO 899-1 <sup>2</sup>                   |
| 1 hr                                  |                                              | 2700 MPa                                  |                                          |
| 1000 hr                               |                                              | 1800 MPa                                  |                                          |
| Impact                                |                                              | Nominal Value Unit                        | Test Method                              |
| Charpy notched impact strength (23°C) |                                              | 2.00 kJ/m <sup>2</sup>                    | ISO 179/1eA <sup>2</sup>                 |
| Charpy impact strength (23°C)         |                                              | 20.0 kJ/m <sup>2</sup>                    | ISO 179/1eU <sup>2</sup>                 |
| Thermal                               |                                              | Nominal Value Unit                        | Test Method                              |
| Deflection Temperature Under Load     |                                              |                                           | ISO 75-2 <sup>2</sup>                    |
| 0.45 MPa                              |                                              | 100 °C                                    |                                          |
| 1.8 MPa                               |                                              | 90.0 °C                                   |                                          |
| Vicat Softening Temperature           |                                              |                                           | ISO 306 <sup>2</sup>                     |
| 50°C/h, B (50N)                       |                                              | 101 °C                                    |                                          |
| CLTE - Flow                           |                                              | 0.000070 cm/cm/°C                         | ISO 11359-2 <sup>2</sup>                 |
| Electrical                            |                                              | Nominal Value Unit                        | Test Method                              |
| Surface resistivity                   |                                              | 1.0E+14 ohm                               | IEC 60093 <sup>2</sup>                   |
| Volume resistivity                    |                                              | 1.0E+13 ohm·m                             | IEC 60093 <sup>2</sup>                   |
| Relative Permittivity                 |                                              |                                           | IEC 60250 <sup>2</sup>                   |
| 100 Hz                                |                                              | 4.00                                      |                                          |
| 1 MHz                                 |                                              | 3.00                                      |                                          |
| Dissipation Factor                    |                                              |                                           | IEC 60250 <sup>2</sup>                   |
| 100 Hz                                |                                              | 0.050                                     |                                          |
| 1 MHz                                 |                                              | 0.040                                     |                                          |
| Comparative tracking index            |                                              | 600                                       | IEC 60112 <sup>2</sup>                   |
| Electric strength                     |                                              | 20 kV/mm                                  | IEC 60243-1 <sup>2</sup>                 |
| Flammability                          |                                              | Nominal Value Unit                        | Test Method                              |
| Burning Behav. at 1.6mm nom. thickn.  |                                              |                                           | ISO 1210 <sup>2</sup>                    |
| 1.60 mm                               |                                              | HB                                        |                                          |

#### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.