

## Technical Data Sheet

### *Polylux* MABS C2 KU BUA49355



Methyl Methacrylate / ABS

#### Product Description

good flow transparent MABS grade

**Processing Method** Injection Molding

**Appearance** Clear/Transparent

**Resin ID** MABS

| Typical Properties                                                  | Nominal Value | Units                   | Test Method |
|---------------------------------------------------------------------|---------------|-------------------------|-------------|
| <b>Physical</b>                                                     |               |                         |             |
| Melt Volume Flow Rate, (220 °C/10.0 kg)                             | 18            | cm <sup>3</sup> /10 min | ISO 1133    |
| Density, (Method A)                                                 | 1.09          | g/cm <sup>3</sup>       | ISO 1183    |
| <b>Mechanical</b>                                                   |               |                         |             |
| Tensile Stress at Yield, (Type 1A, 50 mm/min)                       | 44.0          | MPa                     | ISO 527-2   |
| Tensile Strain at Yield, (Type 1A, 50 mm/min)                       | 3.5           | %                       | ISO 527-2   |
| Tensile Modulus, (1 mm/min, Type 1A)                                | 1900          | 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)                                 | 9.0           | kJ/m <sup>2</sup>       | ISO 179     |
| Charpy Impact Strength - Unnotched                                  |               |                         |             |
| (23 °C, Type 1, Edgewise)                                           | 79            | kJ/m <sup>2</sup>       | ISO 179     |
| (-30 °C, Type 1, Edgewise)                                          | 62            | kJ/m <sup>2</sup>       | ISO 179     |
| Notched Izod Impact Strength, (23 °C, Type 4, Notch A)              | 17            | kJ/m <sup>2</sup>       | ISO 180     |
| <b>Hardness</b>                                                     |               |                         |             |
| Ball Indentation Hardness, (H 358/30)                               | 96.0          | MPa                     | ISO 2039-1  |
| <b>Thermal</b>                                                      |               |                         |             |
| Vicat Softening Temperature                                         |               |                         |             |
| (B (50N), 50 °C/h)                                                  | 93.0          | °C                      | ISO 306     |
| (A (10N), 50 °C/h)                                                  | 103           | °C                      | ISO 306     |
| Deflection Temperature Under Load Unannealed (0.45 MPa), (Flatwise) | 92.0          | °C                      | ISO 75-2/B  |
| Deflection Temperature Under Load Unannealed (1.80 MPa), (Flatwise) | 79.0          | °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, (1.6 mm) | HB  |    | IEC 60695-11-10, -20 |

| Injection Parameters   | Nominal    |       |
|------------------------|------------|-------|
|                        | Value      | Units |
| Drying Time            | 2.0 to 4.0 | hr    |
| Drying Temperature     | 70         | °C    |
| Processing (Melt) Temp | 200 to 240 | °C    |
| Mold Temperature       | 40 to 80   | °C    |