

# POLYLUX<sup>®</sup> (MABS) Typ C3

Methyl Methacrylate / ABS  
Engineering Plastics

## Product Description

Good flow, transparent MABS grade

## General

|                     |                     |                    |
|---------------------|---------------------|--------------------|
| Appearance          | • Clear/Transparent | • Colors Available |
| Processing Method   | • Injection Molding |                    |
| Resin ID (ISO 1043) | • MABS              |                    |

| Physical                                    | Nominal Value (English)   | Nominal Value (SI)        | Test Method     |
|---------------------------------------------|---------------------------|---------------------------|-----------------|
| Density                                     | 1.09 g/cm <sup>3</sup>    | 1.09 g/cm <sup>3</sup>    | ISO 1183/A      |
| Melt Volume-Flow Rate (MVR) (220°C/10.0 kg) | 19 cm <sup>3</sup> /10min | 19 cm <sup>3</sup> /10min | ISO 1133        |
| Mechanical                                  | Nominal Value (English)   | Nominal Value (SI)        | Test Method     |
| Tensile Modulus                             | 290000 psi                | 2000 MPa                  | ISO 527-2/1A/1  |
| Tensile Stress (Yield)                      | 6670 psi                  | 46.0 MPa                  | ISO 527-2/1A/50 |
| Tensile Strain (Yield)                      | 3.8 %                     | 3.8 %                     | ISO 527-2/1A/50 |
| Impact                                      | Nominal Value (English)   | Nominal Value (SI)        | Test Method     |
| Charpy Notched Impact Strength              |                           |                           | ISO 179/1eA     |
| -22°F (-30°C)                               | 4.3 ft·lb/in <sup>2</sup> | 9.0 kJ/m <sup>2</sup>     |                 |
| 73°F (23°C)                                 | 6.7 ft·lb/in <sup>2</sup> | 14 kJ/m <sup>2</sup>      |                 |
| Charpy Unnotched Impact Strength            |                           |                           | ISO 179/1eU     |
| -22°F (-30°C)                               | 30 ft·lb/in <sup>2</sup>  | 62 kJ/m <sup>2</sup>      |                 |
| 73°F (23°C)                                 | 38 ft·lb/in <sup>2</sup>  | 79 kJ/m <sup>2</sup>      |                 |
| Hardness                                    | Nominal Value (English)   | Nominal Value (SI)        | Test Method     |
| Ball Indentation Hardness (H 358/30)        | 12900 psi                 | 89.0 MPa                  | ISO 2039-1      |
| Thermal                                     | Nominal Value (English)   | Nominal Value (SI)        | Test Method     |
| Heat Deflection Temperature                 |                           |                           |                 |
| 66 psi (0.45 MPa), Unannealed               | 187 °F                    | 86.0 °C                   | ISO 75-2/Bf     |
| 264 psi (1.8 MPa), Unannealed               | 167 °F                    | 75.0 °C                   | ISO 75-2/Af     |
| Vicat Softening Temperature                 |                           |                           |                 |
| --                                          | 214 °F                    | 101 °C                    | ISO 306/A50     |
| --                                          | 199 °F                    | 93.0 °C                   | ISO 306/B50     |
| Flammability                                | Nominal Value (English)   | Nominal Value (SI)        | Test Method     |
| Burning Rate                                |                           |                           |                 |
| 0.0787 in (2.00 mm)                         | < 3.9 in/min              | < 100 mm/min              | ISO 3795        |
| 0.0787 in (2.00 mm)                         | < 3.9 in/min              | < 100 mm/min              | FMVSS 302       |
| Glow Wire Flammability Index                |                           |                           | IEC 60695-2-12  |
| 0.06 in (1.5 mm)                            | 1250 °F                   | 675 °C                    |                 |
| 0.12 in (3.0 mm)                            | 1250 °F                   | 675 °C                    |                 |
| Glow Wire Ignition Temperature              |                           |                           | IEC 60695-2-13  |
| 0.06 in (1.5 mm)                            | 1290 °F                   | 700 °C                    |                 |
| 0.12 in (3.0 mm)                            | 1290 °F                   | 700 °C                    |                 |

## Additional Information

- 1.) Not for use in food contact applications
- 2.) Not for use in medical or pharmaceutical applications



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| Injection              | Nominal Value (English) | Nominal Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 158 °F                  | 70 °C              |
| Drying Time            | 2.0 to 4.0 hr           | 2.0 to 4.0 hr      |
| Processing (Melt) Temp | 392 to 464 °F           | 200 to 240 °C      |
| Mold Temperature       | 104 to 176 °F           | 40 to 80 °C        |

Notes

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

