



## Bergaform™ C300

Acetal (POM) Copolymer

### Key Characteristics

| General               |                        |          |
|-----------------------|------------------------|----------|
| Material Status       | • Commercial: Active   |          |
| Regional Availability | • Africa & Middle East | • Europe |
| Processing Method     | • Injection Molding    |          |

### Technical Properties <sup>1</sup>

| Physical                                    | Typical Value (English)             | Typical Value (SI)                  | Test Method |
|---------------------------------------------|-------------------------------------|-------------------------------------|-------------|
| Density                                     | 1.39 to 1.43 g/cm <sup>3</sup>      | 1.39 to 1.43 g/cm <sup>3</sup>      | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (190°C/2.16 kg)   | 8.0 to 11 g/10 min                  | 8.0 to 11 g/10 min                  | ISO 1133    |
| Melt Volume-Flow Rate (MVR) (190°C/2.16 kg) | 6.00 to 8.00 cm <sup>3</sup> /10min | 6.00 to 8.00 cm <sup>3</sup> /10min | ISO 1133    |
| Mechanical                                  | Typical Value (English)             | Typical Value (SI)                  | Test Method |
| Tensile Modulus                             | 406000 psi                          | 2800 MPa                            | ISO 527-2   |
| Tensile Stress (Yield)                      | 8990 psi                            | 62.0 MPa                            | ISO 527-2   |
| Tensile Strain (Yield)                      | 10 %                                | 10 %                                | ISO 527-2   |
| Tensile Strain (Break)                      | 50 %                                | 50 %                                | ISO 527-2   |
| Flexural Modulus                            | 363000 psi                          | 2500 MPa                            | ISO 178     |
| Flexural Stress                             | 9280 psi                            | 64.0 MPa                            | ISO 178     |
| Impact                                      | Typical Value (English)             | Typical Value (SI)                  | Test Method |
| Charpy Notched Impact Strength              |                                     |                                     | ISO 179     |
| -22°F (-30°C)                               | 2.6 ft·lb/in <sup>2</sup>           | 5.5 kJ/m <sup>2</sup>               |             |
| 73°F (23°C)                                 | 2.9 ft·lb/in <sup>2</sup>           | 6.0 kJ/m <sup>2</sup>               |             |
| Charpy Unnotched Impact Strength            |                                     |                                     | ISO 179     |
| -22°F (-30°C)                               | No Break                            | No Break                            |             |
| 73°F (23°C)                                 | No Break                            | No Break                            |             |
| Thermal                                     | Typical Value (English)             | Typical Value (SI)                  | Test Method |
| Heat Deflection Temperature                 |                                     |                                     | ISO 75-2/A  |
| 264 psi (1.8 MPa), Unannealed               | 239 °F                              | 115 °C                              |             |
| Vicat Softening Temperature                 | 302 °F                              | 150 °C                              | ISO 306     |
| Melting Temperature (DSC)                   | 329 to 338 °F                       | 165 to 170 °C                       | ISO 3146    |
| Electrical                                  | Typical Value (English)             | Typical Value (SI)                  | Test Method |
| Comparative Tracking Index                  | 600 V                               | 600 V                               | IEC 60112   |
| Flammability                                | Typical Value (English)             | Typical Value (SI)                  | Test Method |
| Flame Rating (0.13 in (3.2 mm))             | HB                                  | HB                                  | UL 94       |
| FMVSS Flammability                          | < 3.9 in/min                        | < 100 mm/min                        | DIN 75200   |

### Processing Information

| Injection              | Typical Value (English) | Typical Value (SI) |
|------------------------|-------------------------|--------------------|
| Drying Temperature     | 212 to 248 °F           | 100 to 120 °C      |
| Drying Time            | 2.0 to 4.0 hr           | 2.0 to 4.0 hr      |
| Processing (Melt) Temp | 338 to 446 °F           | 170 to 230 °C      |
| Mold Temperature       | 140 to 248 °F           | 60 to 120 °C       |