

## CALIBRE™ 303V-15

### Polycarbonate Resin

#### Overview

CALIBRE™ 300V-15 Series polycarbonate resins offer exceptional impact resistance, heat distortion resistance, optical clarity and meets UL94 V-2 rating. The CALIBRE 300V series products are available in 2 additive packages: CALIBRE 302V: UV stabilizer. CALIBRE 303V: Mold release and UV stabilizer.

Govt. And Industry Standards:

- CSA (Canadian Standards Association)
- UL (Underwriters Laboratory, Inc.)

Applications:

- Electronic components
- Lighting
- Storage media housings

| Physical                                     | Nominal Value (English)  | Nominal Value (SI)     | Test Method  |
|----------------------------------------------|--------------------------|------------------------|--------------|
| Density                                      | 1.20 g/cm <sup>3</sup>   | 1.20 g/cm <sup>3</sup> | ISO 1183/B   |
| Melt Mass-Flow Rate (MFR) (300°C/1.2 kg)     | 15 g/10 min              | 15 g/10 min            | ISO 1133     |
| Molding Shrinkage - Flow                     | 5.0E-3 to 7.0E-3 in/in   | 0.50 to 0.70 %         | ISO 294-4    |
| Mechanical                                   | Nominal Value (English)  | Nominal Value (SI)     | Test Method  |
| Tensile Modulus                              | 334000 psi               | 2300 MPa               | ISO 527-2/50 |
| Tensile Stress                               |                          |                        | ISO 527-2/50 |
| Yield                                        | 8700 psi                 | 60.0 MPa               |              |
| Break                                        | 10300 psi                | 71.0 MPa               |              |
| Tensile Strain                               |                          |                        | ISO 527-2/50 |
| Yield                                        | 6.0 %                    | 6.0 %                  |              |
| Break                                        | 150 %                    | 150 %                  |              |
| Flexural Modulus <sup>1</sup>                | 348000 psi               | 2400 MPa               | ISO 178      |
| Flexural Stress <sup>1</sup>                 | 14100 psi                | 97.0 MPa               | ISO 178      |
| Impact                                       | Nominal Value (English)  | Nominal Value (SI)     | Test Method  |
| Charpy Notched Impact Strength (73°F (23°C)) | 12 ft-lb/in <sup>2</sup> | 25 kJ/m <sup>2</sup>   | ISO 179/1eA  |
| Notched Izod Impact (73°F (23°C))            | 16 ft-lb/in              | 850 J/m                | ISO 180/4A   |
| Thermal                                      | Nominal Value (English)  | Nominal Value (SI)     | Test Method  |
| Heat Deflection Temperature                  |                          |                        |              |
| 66 psi (0.45 MPa), Annealed                  | 284 °F                   | 140 °C                 | ISO 75-2/B   |
| 264 psi (1.8 MPa), Unannealed                | 250 °F                   | 121 °C                 | ISO 75-2/A   |
| 264 psi (1.8 MPa), Annealed                  | 279 °F                   | 137 °C                 | ISO 75-2/A   |
| Vicat Softening Temperature                  | 293 °F                   | 145 °C                 | ISO 306/B50  |
| Ball Indentation Temperature                 | 257 °F                   | 125 °C                 | IEC 60335-1  |
| Electrical                                   | Nominal Value (English)  | Nominal Value (SI)     | Test Method  |
| Comparative Tracking Index                   |                          |                        | IEC 60112    |
| 0.0787 in (2.00 mm), Solution A              | 250 V                    | 250 V                  |              |
| Flammability                                 | Nominal Value (English)  | Nominal Value (SI)     | Test Method  |
| Flame Rating <sup>2</sup>                    |                          |                        | UL 94        |
| 0.06 in (1.6 mm)                             | V-2                      | V-2                    |              |
| 0.13 in (3.2 mm)                             | V-2                      | V-2                    |              |