#### **Product Information**

# **DuPont<sup>™</sup> Zytel<sup>®</sup>**

nylon resin

## Zytel® 101L BKB009

Zytel\* 101L BKB009 is a lubricated polyamide 66 resin for injection molding.

| Property                         | Test Method     | Units      | Value<br>DAM |
|----------------------------------|-----------------|------------|--------------|
| Identification                   |                 |            | ,            |
| Resin Identification             | ISO 1043        | 1.         | PA66         |
| Part Marking Code                | ISO 11469       | ,          | >PA66<       |
| Mechanical                       |                 |            |              |
| Yield Stress                     | ISO 527         | MPa (kpsi) | 88 (12.8)    |
| Yield Strain                     | ISO 527         | %          | 4.6          |
| Nominal Strain at Break          | ISO 527         | %          | 16           |
| Tensile Modulus                  | ISO 527         | MPa (kpsi) | 3050 (440)   |
| Flexural Modulus                 | ISO 178         | MPa (kpsi) | 2800 (410)   |
| Notched Charpy Impact Strength   | ISO 179/IeA     | kJ/m²      |              |
| -30°C (-22°F)                    |                 |            | 3.7          |
| 23°C (73°F)                      |                 |            | 4.0          |
| Unnotched Charpy Impact Strength | ISO 179/1eU     | kJ/m²      |              |
| -30°C (-22°F)                    |                 |            | 134          |
| 23°C (73°F)                      |                 |            | 203          |
| Thermal                          |                 |            |              |
| Deflection Temperature           | ISO 75-1/-2     | °C (°F)    | •            |
| 0.45MPa                          |                 |            | 200 (392)    |
| 1.80MPa                          |                 |            | 70 (158)     |
| Melting Temperature              | ISO 11357-1/-3  | °C (°F)    |              |
| 10°C/min                         |                 |            | 262 (504)    |
| Flammability                     |                 | ,          |              |
| Flammability Classification      | IEC 60695-11-10 |            |              |
| 0.71mm                           |                 |            | V-2          |
| Flammability Classification      | UI.94           | ļ          |              |
| 0.71mm                           |                 |            | V-2          |

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, hendling, purging, drying, et ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm. Test temperatures are 23°C unless otherwise stated.

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| Property                              | Test Method    | Units         | Value       |
|---------------------------------------|----------------|---------------|-------------|
|                                       | 1 est method   | Citis         | DAM         |
| Flammability                          |                |               |             |
| Glow Wire Flammability Index          | IEC 60695-2-12 | °C            |             |
| 0.71mm                                |                |               | 960         |
| -1.5mm                                |                |               | 960         |
| 3.0mm                                 |                |               | 960         |
| Glow Wire Ignition Temperature        | IEC 60695-2-13 | °C            |             |
| 0.71mm                                |                |               | 725         |
| 1.5mm                                 |                |               | 750         |
| 3.0mm                                 |                |               | 800         |
| High Amperage Arc Ignition Resistance | UL 746A        | arcs          |             |
| 0.71mm                                |                |               | 120         |
| 1.5mm                                 |                |               | 168         |
| 3.0mm                                 |                |               | 182         |
| 6.0mm                                 |                |               | 200         |
| Hot Wire Ignition                     | UL 746A        | s             |             |
| 0.71mm                                |                |               | 7           |
| 1.5mm                                 |                |               | 13          |
| 3.0mm                                 |                |               | 17          |
| 6.0mm                                 |                |               | 20          |
| Temperature Index                     |                |               |             |
| RTI, Electrical                       | UL 746B        | °C            |             |
| 0.71mm                                |                |               | 130         |
| RTI, Impact                           | UL 746B        | °C            | •           |
| 0.71mm                                |                |               | . 75        |
| RTI, Strength                         | UL 746B        | °C            |             |
| 0.71mm                                |                | j j           | 85          |
| Other                                 |                |               |             |
| Density                               | ISO 1183       | kg/m³ (g/cm³) | 1140 (1.14) |

Contact DuPont for Material Safety Data Sheet, general guides and/or additional information about ventilation, handling, purging, drying, etc ISO Mechanical properties measured at 4.0mm, ISO Electrical properties measured at 2.0mm, and all ASTM properties measured at 3.2mm. Test temperatures are 23°C unless otherwise stated.

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Zytel® 101L BKB009

| Property                        | Test Method | Units   | Value<br>DAM      |
|---------------------------------|-------------|---------|-------------------|
|                                 |             |         |                   |
| Melt Temperature Range          |             | °C (°F) | 280-300 (535-570) |
| Melt Temperature Optimum        |             | °C (°F) | 290 (555)         |
| Mold Temperature Range          |             | °C (°F) | 50-90 (120-190)   |
| Mold Temperature Optimum        |             | °C (°F) | 70 (160)          |
| Drying Time, Dehumidified Dryer |             | h       | 2-4               |
| Drying Temperature              |             | °C (°F) | 80 (175)          |
| Processing Moisture Content     |             | %       | <0.20             |

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