**JPLGABS**

ABS with excellent balance of processability, impact resistance and heat resistance

**Typical Material Properties**

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| General |  |  |
| Material Status | Commercial: Active |  |
| Availability | North America |  |
| Forms | Pellets |  |
| Processing Method | Injection Molding | Sheet Extrusion |
|  | Profile Extrusion | Thermoforming |

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| Physical Properties | Nominal Values | Test Method |
| Specific Gravity | 1.04 | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg) | 3.9 g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow | 4.0E-3 to 7.0E-3 in/in | ASTM D955 |

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| Hardness |  |  |
| Rockwell Hardness |  | ASTM D785 |
| L-Scale | 80 |  |
| R-Scale | 108 |  |

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| Mechanical Properties |  |  |
| Tensile Modulus1 | 270000 psi | ASTM D638 |
| Tensile Strength1 |  | ASTM D638 |
| Yield | 4400 psi |  |
| Break | 4600 psi |  |
| Tensile Elongation1 (Break) | 50 % | ASTM D638 |
| Flexural Modulus2 | 320000 psi | ASTM D790 |
| Flexural Strength2 | 9000 psi | ASTM D79 |

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| Impact |  |  |
| Notched Izod Impact3 |  | ASTM D256 |
| 0°F, 0.125 in | 1.5 ft·lb/in |  |
| 73°F, 0.125 in | 2.5 ft·lb/in |  |
| Gardner Impact |  | ASTM D3029 |
| 0°F, 0.100 in | 175 in·lb |  |
| 73°F, 0.100 in | 200 in·lb |  |

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| Thermal |  |  |
| Deflection Temperature Under Load (264 psi, Unannealed, 0.125 in) | 205 °F | ASTM D648 |
| Vicat Softening Temperature | 220 °F | ASTM D1525 |

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| Flammability |  |  |
| Flame Rating (0.0600 in) | HB | UL 94 |

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| Injection | Nominal Value |  |
| Drying Temperature | 180 to 190 °F |  |
| Drying Time | 2.0 to 4.0 hr |  |
| Suggested Max Moisture | 0.10 % |  |
| Processing (Melt) Temp | 425 to 525 °F |  |
| Mold Temperature | 80.0 to 140 °F |  |
| Back Pressure | 50.0 to 500 psi |  |
| Clamp Tonnage | 2.0 to 5.0 tons/in² |  |
| Screw L/D Ratio | 20.0:1.0 |  |
| Screw Compression Ratio | 1.5:1.0 to 3.5:1.0 |  |

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| Notes |  |  |
| 1Type I, 2.0 in/min | | |
| 2Type I, 0.050 in/min | | |
| 310 mil Notch Depth | | |
| 40.10 mil Notch Depth | | |