**JPSANC**

SAN with excellent balance of processability, clarity, chemical and heat resistance and stiffness

**Typical Material Properties**

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

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| Physical Properties | Nominal Values | Test Method |
| Specific Gravity | 1.08  | ASTM D792 |
| Melt Mass-Flow Rate (MFR) (230°C/3.8 kg) | 25 g/10 min | ASTM D1238 |
| Molding Shrinkage - Flow  | 3.0E-3 to 7.0E-3 in/in | ASTM D955 |

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| Hardness |  |  |
| Rockwell Hardness (R-Scale) | 125 |  ASTM D785 |

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| Mechanical Properties |  |  |
| Tensile Modulus1 | 520000 psi | ASTM D638 |
| Tensile Strength1 |    | ASTM D638 |
| Yield | 8070 psi |   |
| Break | 8070 psi |   |
| Tensile Elongation1 (Break) | 1.7 % | ASTM D638 |
| Flexural Modulus | 619000 psi | ASTM D790 |
| Flexural Strength (Yield) | 14400 psi | ASTM D790 |

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| Impact |  |  |
| Notched Izod Impact (73°F, 0.125 in) | 0.30 ft·lb/in | ASTM D256 |

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| Thermal |  |  |
| Deflection Temperature Under Load |    | ASTM D648 |
| 66 psi, Unannealed | 213 °F |   |
| 66 psi, Annealed | 218 °F |   |
| 264 psi, Unannealed | 189 °F |   |
| 264 psi, Annealed | 213 °F |   |
| Vicat Softening Temperature | 235 °F | ASTM D1525 |
| CLTE - Flow  | 3.5E-5 in/in/°F | ASTM D696 |

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| Flammability |  |  |
| Flame Rating | HB  | UL 94 |
| Oxygen Index | 20 % | ASTM D2863 |

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| Optical |  |  |
| Transmittance | 93.9 % | ASTM D1003 |
| Haze | 0.40 % | ASTM D1003 |

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| Injection | Nominal Value |  |
| Drying Temperature | 160 to 180 °F |   |
| Drying Time | 2.0 hr |   |
| Suggested Max Moisture | 0.10 % |   |
| Suggested Max Regrind | 20 % |   |
| Rear Temperature | 300 to 400 °F |   |
| Front Temperature | 375 to 450 °F |   |
| Mold Temperature | 30.0 to 190 °F |   |
| Injection Pressure | 5000 to 20000 psi |   |
| Back Pressure | 10.0 to 500 psi |   |
| Clamp Tonnage | 2.0 to 5.0 tons/in² |   |
| Screw L/D Ratio | 20.0:1.0 to 24.0:1.0  |   |
| Screw Compression Ratio | 1.5:1.0 to 2.0:1.0  |  |

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| Notes |  |  |
| 1Type I, 2.0 in/min |