



OSTERMAN

Infino NH-1015S

LOTTE ADVANCED MATERIALS CO., LTD. - Polycarbonate + ABS

Thursday, September 29, 2016

General Information

General

| | | | |
|-----------------|--|-----------------------------|-----------------|
| Material Status | • Commercial: Active | | |
| Availability | • Africa & Middle East • Asia Pacific | • Europe • Latin America | • North America |
| Features | • Flame Retardant | | |
| Uses | • Appliances | • Computer Components | |

ASTM & ISO Properties ¹

| Physical | Nominal Value | Unit | Test Method |
|--|---------------|-----------------------|--------------|
| Specific Gravity (Natural) | 1.18 | | ASTM D792 |
| Density (Natural) | 1.18 | g/cm ³ | ISO 1183 |
| Melt Mass-Flow Rate (MFR) (220°C/10.0 kg) | 36 | g/10 min | ASTM D1238 |
| Melt Mass-Flow Rate (MFR) (250°C/10.0 kg) | 36 | g/10 min | ISO 1133 |
| Mechanical | Nominal Value | Unit | Test Method |
| Tensile Modulus ² | 348000 | psi | ASTM D638 |
| Tensile Modulus | 363000 | psi | ISO 527-2/50 |
| Tensile Strength ² (Yield) | 8560 | psi | ASTM D638 |
| Tensile Stress (Yield) | 8850 | psi | ISO 527-2/50 |
| Tensile Strength ² (Break) | 6820 | psi | ASTM D638 |
| Tensile Stress (Break) | 6960 | psi | ISO 527-2/50 |
| Tensile Elongation ² (Break) | 26 | % | ASTM D638 |
| Tensile Strain (Break) | 27 | % | ISO 527-2/50 |
| Flexural Modulus ³ | 348000 | psi | ASTM D790 |
| Flexural Modulus ⁴ | 370000 | psi | ISO 178 |
| Flexural Strength ³ | 12300 | psi | ASTM D790 |
| Flexural Stress ⁴ | 12900 | psi | ISO 178 |
| Impact | Nominal Value | Unit | Test Method |
| Charpy Notched Impact Strength ⁵ (73°F) | 13 | ft-lb/in ² | ISO 179/1eA |
| Notched Izod Impact (73°F, 0.125 in) | 9.6 | ft-lb/in | ASTM D256 |
| Notched Izod Impact Strength ⁵ (73°F) | 17 | ft-lb/in ² | ISO 180/1A |
| Hardness | Nominal Value | Unit | Test Method |
| Rockwell Hardness (R-Scale) | 121 | | ASTM D785 |
| Rockwell Hardness (R-Scale) | 121 | | ISO 2039-2 |
| Thermal | Nominal Value | Unit | Test Method |
| Deflection Temperature Under Load 66 psi, Unannealed, 0.252 in | 205 | °F | ASTM D648 |
| Heat Deflection Temperature 66 psi, Unannealed, 0.157 in | 203 | °F | ISO 75-2/B |
| Deflection Temperature Under Load 264 psi, Unannealed, 0.252 in | 198 | °F | ASTM D648 |
| Heat Deflection Temperature 264 psi, Unannealed, 0.157 in | 183 | °F | ISO 75-2/A |

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| Thermal | Nominal Value | Unit | Test Method |
|-----------------------------|---------------|------|--------------|
| Vicat Softening Temperature | | | |
| -- | 212 | °F | ISO 306/B50 |
| -- | 217 | °F | ISO 306/B120 |
| RTI Elec (0.06 in) | 194 | °F | UL 746 |
| RTI Imp (0.06 in) | 185 | °F | UL 746 |
| RTI Str (0.06 in) | 194 | °F | UL 746 |
| Flammability | Nominal Value | Unit | Test Method |
| Flame Rating (0.06 in) | V-0 | | UL 94 |

Processing Information

| Injection | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature | | |
| -- | 176 | °F |
| Desiccant Dryer | 176 | °F |
| Drying Time | | |
| -- | 3.0 | hr |
| Desiccant Dryer | 2.0 | hr |
| Suggested Max Moisture | < 0.020 | % |
| Rear Temperature | 446 to 464 | °F |
| Middle Temperature | 482 to 518 | °F |
| Front Temperature | 518 to 536 | °F |
| Nozzle Temperature | 536 | °F |
| Mold Temperature | 122 to 194 | °F |
| Injection Pressure | 14200 | psi |
| Back Pressure | 72.5 | psi |
| Screw Speed | 50 | rpm |

Injection Notes

Hot Runner Manifold Temperature: 280°C

Hot Runner Valve Nozzle Temperature: 280°C

Notes

¹ Typical properties: these are not to be construed as specifications.

² 2.0 in/min

³ 0.11 in/min

⁴ 0.079 in/min

⁵ Thickness: 4mm