

# Infino HA-4350G

Lotte Chemical Corporation - Polyphthalamide

## General Information

### General

|                        |                             |
|------------------------|-----------------------------|
| Filler / Reinforcement | • Glass Fiber               |
| Uses                   | • Automotive Under the Hood |

## Properties<sup>1</sup>

| Physical   | Nominal Value    | Unit                  | Test Method |
|--|------------------|-----------------------|-------------|
| Density / Specific Gravity (Natural)               | 1.47             |                       | ASTM D792   |
| Density (Natural)                                  | 1.47             | g/cm <sup>3</sup>     | ISO 1183    |
| Melt Mass-Flow Rate (MFR) (330°C/2.16 kg)          | 17               | g/10 min              | ASTM D1238  |
| Melt Mass-Flow Rate (MFR) (330°C/2.16 kg)          | 17               | g/10 min              | ISO 1133    |
| Molding Shrinkage - Flow (0.126 in)                | 2.0E-3 to 5.0E-3 | in/in                 | ASTM D955   |
| Molding Shrinkage - Across Flow (0.126 in)         | 4.0E-3 to 7.0E-3 | in/in                 | ASTM D955   |
| Molding Shrinkage                                  |                  |                       | ISO 294-4   |
| Across Flow : 0.0787 in                            | 0.40 to 0.70     | %                     |             |
| Flow : 0.0787 in                                   | 0.20 to 0.50     | %                     |             |
| Mechanical   | Nominal Value    | Unit                  | Test Method |
| Tensile Strength <sup>2</sup> (Yield)              | 29900            | psi                   | ASTM D638   |
| Tensile Stress (Yield)                             | 31200            | psi                   | ISO 527-2/5 |
| Tensile Strength <sup>2</sup> (Break)              | 29900            | psi                   | ASTM D638   |
| Tensile Stress (Break)                             | 31200            | psi                   | ISO 527-2/5 |
| Tensile Elongation <sup>2</sup> (Break)            | 4.1              | %                     | ASTM D638   |
| Tensile Strain (Break)                             | 4.2              | %                     | ISO 527-2/5 |
| Flexural Modulus <sup>3</sup>                      | 1.56E+6          | psi                   | ASTM D790   |
| Flexural Modulus <sup>4</sup>                      | 1.52E+6          | psi                   | ISO 178     |
| Flexural Strength <sup>3</sup>                     | 39800            | psi                   | ASTM D790   |
| Flexural Stress <sup>4</sup>                       | 39900            | psi                   | ISO 178     |
| Impact   | Nominal Value    | Unit                  | Test Method |
| Charpy Notched Impact Strength <sup>5</sup> (73°F) | 5.2              | ft-lb/in <sup>2</sup> | ISO 179/1eA |
| Notched Izod Impact                                |                  |                       | ASTM D256   |
| 73°F, 0.125 in                                     | 1.4              | ft-lb/in              |             |
| 73°F, 0.250 in                                     | 1.4              | ft-lb/in              |             |
| Notched Izod Impact Strength <sup>5</sup> (73°F)   | 4.8              | ft-lb/in <sup>2</sup> | ISO 180/1A  |
| Hardness   | Nominal Value    | Unit                  | Test Method |
| Rockwell Hardness (R-Scale)                        | 124              |                       | ASTM D785   |
| Rockwell Hardness (R-Scale)                        | 124              |                       | ISO 2039-2  |
| Thermal  | Nominal Value    | Unit                  | Test Method |
| Deflection Temperature Under Load                  |                  |                       | ASTM D648   |
| 264 psi, Unannealed, 0.252 in                      | 554              | °F                    |             |
| Deflection Temperature Under Load                  |                  |                       | ISO 75-2/A  |
| 264 psi, Unannealed, 0.157 in                      | 554              | °F                    |             |

# Infino HA-4350G

## Lotte Chemical Corporation - Polyphthalamide

### Processing Information

| Injection              | Nominal Value | Unit |
|------------------------|---------------|------|
| Drying Temperature     |               |      |
| Desiccant Dryer        | 248           | °F   |
| Hot Air Dryer          | 248           | °F   |
| Drying Time            |               |      |
| Desiccant Dryer        | 4.0           | hr   |
| Hot Air Dryer          | 4.0           | hr   |
| Suggested Max Moisture | 0.10          | %    |
| Rear Temperature       | 572           | °F   |
| Middle Temperature     | 581 to 590    | °F   |
| Front Temperature      | 599 to 608    | °F   |
| Nozzle Temperature     | 626           | °F   |
| Mold Temperature       | 266 to 284    | °F   |
| Injection Pressure     | 1140          | psi  |
| Back Pressure          | 142           | psi  |
| Screw Speed            | 140 to 150    | rpm  |

### Injection Notes

Hot Runner Temperature: 330°C

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> 0.20 in/min

<sup>3</sup> 0.11 in/min

<sup>4</sup> 0.079 in/min

<sup>5</sup> 4mm