

# TORZEN® G4300HSL NC01

Polyamide 66  
INVISTA Engineering Polymers

Message:

TORZEN® G4300HSL NC01 is a 43% glass reinforced, heat stabilized, natural, PA66 resin suitable for many injection molding applications where high tensile strength and dimensional stability are needed.

| General Information                 |                                  |                   |             |
|-------------------------------------|----------------------------------|-------------------|-------------|
| Filler / Reinforcement              | Glass Fiber,43% Filler by Weight |                   |             |
| Additive                            | Heat Stabilizer                  |                   |             |
| Features                            | Good Dimensional Stability       |                   |             |
|                                     | Good Mold Release                |                   |             |
|                                     | Heat Stabilized                  |                   |             |
|                                     | High Tensile Strength            |                   |             |
| Agency Ratings                      | EC 1907/2006 (REACH)             |                   |             |
| RoHS Compliance                     | RoHS Compliant                   |                   |             |
| Appearance                          | Natural Color                    |                   |             |
| Processing Method                   | Injection Molding                |                   |             |
| Physical                            | Nominal Value                    | Unit              | Test Method |
| Density                             | 1.50                             | g/cm <sup>3</sup> | ISO 1183    |
| Molding Shrinkage                   |                                  |                   | ISO 294-4   |
| Across Flow : 2.00 mm               | 0.85 to 0.95                     | %                 |             |
| Flow : 2.00 mm                      | 0.25 to 0.35                     | %                 |             |
| Water Absorption                    |                                  |                   | ISO 62      |
| 23°C, 24 hr                         | 0.60                             | %                 |             |
| Equilibrium, 23°C, 50% RH           | 1.6                              | %                 |             |
| Mechanical                          | Nominal Value                    | Unit              | Test Method |
| Tensile Modulus                     | 14200                            | MPa               | ISO 527-2   |
| Tensile Stress (Break)              | 235                              | MPa               | ISO 527-2   |
| Tensile Strain (Break)              | 2.5                              | %                 | ISO 527-2   |
| Flexural Modulus                    | 13100                            | MPa               | ISO 178     |
| Flexural Stress                     | 325                              | MPa               | ISO 178     |
| Impact                              | Nominal Value                    | Unit              | Test Method |
| Charpy Notched Impact Strength      |                                  |                   | ISO 179     |
| -40°C                               | 11                               | kJ/m <sup>2</sup> |             |
| 23°C                                | 14                               | kJ/m <sup>2</sup> |             |
| Notched Izod Impact Strength (23°C) | 14                               | kJ/m <sup>2</sup> | ISO 180     |
| Thermal                             | Nominal Value                    | Unit              | Test Method |
| Heat Deflection Temperature         |                                  |                   |             |

| 0.45 MPa, Unannealed   | 260             | °C   | ISO 75-2/B  |
|------------------------|-----------------|------|-------------|
| 1.8 MPa, Unannealed    | 255             | °C   | ISO 75-2/A  |
| Melting Temperature    | 262             | °C   | ISO 11357-3 |
| Injection              | Nominal Value   | Unit |             |
| Drying Temperature     | 80.0            | °C   |             |
| Drying Time            | 3.0 to 4.0      | hr   |             |
| Suggested Max Moisture | 0.080 to 0.18   | %    |             |
| Rear Temperature       | 250 to 270      | °C   |             |
| Middle Temperature     | 270 to 290      | °C   |             |
| Front Temperature      | 270 to 290      | °C   |             |
| Nozzle Temperature     | 270 to 290      | °C   |             |
| Processing (Melt) Temp | 280 to 300      | °C   |             |
| Mold Temperature       | 50.0 to 90.0    | °C   |             |
| Back Pressure          | 0.200 to 1.00   | MPa  |             |
| Cushion                | 4.00 to 6.00    | mm   |             |
| Vent Depth             | 7.0E-3 to 0.040 | mm   |             |
| Screw Speed            | Low rpm         |      |             |

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

#### Recommended distributors for this material

### Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China

