

# Leona™ 91G40

Polyamide 66

Asahi Kasei Chemicals Corporation

Message:

Leona™ 91G40 is a Polyamide 66 (Nylon 66) product filled with 40% milled glass fiber. It is available in Africa & Middle East, Asia Pacific, Europe, or North America. Applications of Leona™ 91G40 include automotive, construction applications and industrial applications.

Characteristics include:

- Good Aesthetics
- Good UV Resistance
- High Flow
- High Stiffness
- High Strength

| General Information    |                                         |
|------------------------|-----------------------------------------|
| Filler / Reinforcement | Milled Glass Fiber,40% Filler by Weight |
| Features               | Good UV Resistance                      |
|                        | High Flow                               |
|                        | High Stiffness                          |
|                        | High Strength                           |
|                        | Pleasing Surface Appearance             |
| Uses                   | Automotive Applications                 |
|                        | Automotive Exterior Parts               |
|                        | Industrial Applications                 |
|                        | Windows & Doors                         |

| Physical                  | Dry  | Conditioned | Unit              | Test Method           |
|---------------------------|------|-------------|-------------------|-----------------------|
| Specific Gravity          | 1.46 | --          | g/cm <sup>3</sup> | ASTM D792, ISO 1183   |
| Molding Shrinkage         |      |             |                   | Internal Method       |
| Across Flow               | 0.80 | --          | %                 |                       |
| Flow                      | 0.70 | --          | %                 |                       |
| Water Absorption          |      |             |                   |                       |
| Saturation, 23°C          | --   | 1.3         | %                 |                       |
| Equilibrium, 23°C, 50% RH | --   | 1.3         | %                 | ISO 62                |
| Hardness                  | Dry  | Conditioned | Unit              | Test Method           |
| Rockwell Hardness         |      |             |                   | ASTM D785, ISO 2039-2 |
| M-Scale                   | 89   | --          |                   |                       |
| R-Scale                   | 120  | --          |                   |                       |
| Mechanical                | Dry  | Conditioned | Unit              | Test Method           |
| Tensile Modulus (23°C)    | 7400 | 5200        | MPa               | ISO 527-2             |
| Tensile Stress            |      |             |                   |                       |
| Yield, 23°C               | --   | 82.0        | MPa               | ISO 527-2             |

|                                  |        |             |                   |             |
|----------------------------------|--------|-------------|-------------------|-------------|
| Break, 23°C                      | 125    | 78.0        | MPa               | ISO 527-2   |
| --                               | 127    | 98.0        | MPa               | ASTM D638   |
| Tensile Strain                   |        |             |                   |             |
| Yield, 23°C                      | --     | 3.5         | %                 | ISO 527-2   |
| Break                            | 3.0    | 3.5         | %                 | ASTM D638   |
| Break, 23°C                      | 3.0    | 6.0         | %                 | ISO 527-2   |
| Flexural Modulus                 |        |             |                   |             |
| --                               | 6500   | 5600        | MPa               | ASTM D790   |
| 23°C                             | 6800   | 4900        | MPa               | ISO 178     |
| Flexural Strength                |        |             |                   |             |
| --                               | 206    | 166         | MPa               | ASTM D790   |
| 23°C                             | 186    | 130         | MPa               | ISO 178     |
| Impact                           | Dry    | Conditioned | Unit              | Test Method |
| Charpy Notched Impact Strength   | 3.0    | 3.0         | kJ/m <sup>2</sup> | ISO 179     |
| Charpy Unnotched Impact Strength | 39     | 56          | kJ/m <sup>2</sup> | ISO 179     |
| Notched Izod Impact              | 30     | 35          | J/m               | ASTM D256   |
| Thermal                          | Dry    | Conditioned | Unit              | Test Method |
| Heat Deflection Temperature      |        |             |                   |             |
| 0.45 MPa, Unannealed             | 220    | --          | °C                | ISO 75-2/B  |
| 1.8 MPa, Unannealed              | 220    | --          | °C                | ASTM D648   |
| 1.8 MPa, Unannealed              | 183    | --          | °C                | ISO 75-2/A  |
| CLTE - Flow                      | 3.0E-5 | --          | cm/cm/°C          | ASTM D696   |

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

