

# Leona™ 13G25

Polyamide 66

Asahi Kasei Chemicals Corporation

## Message:

Leona™ 13G25 is a Polyamide 66 (Nylon 66) product filled with 25% glass fiber. It is available in Africa & Middle East, Asia Pacific, Europe, or North America. Applications of Leona™ 13G25 include automotive, electrical/electronic applications and engineering/industrial parts.

Characteristics include:

- Flame Rated
- Creep Resistant
- Fatigue Resistant
- High Stiffness
- High Strength

| General Information    |                                    |
|------------------------|------------------------------------|
| UL YellowCard          | E48285-240886                      |
| Filler / Reinforcement | Glass Fiber,25% Filler by Weight   |
| Features               | Fatigue Resistant                  |
|                        | Good Creep Resistance              |
|                        | High Stiffness                     |
|                        | High Strength                      |
| Uses                   | Automotive Applications            |
|                        | Automotive Under the Hood          |
|                        | Electrical/Electronic Applications |
|                        | Structural Parts                   |

| Physical                  | Dry  | Conditioned | Unit              | Test Method           |
|---------------------------|------|-------------|-------------------|-----------------------|
| Specific Gravity          | 1.32 | --          | g/cm <sup>3</sup> | ASTM D792, ISO 1183   |
| Molding Shrinkage         |      |             |                   | Internal Method       |
| Across Flow               | 0.90 | --          | %                 |                       |
| Flow                      | 0.50 | --          | %                 |                       |
| Water Absorption          |      |             |                   |                       |
| Saturation, 23°C          | --   | 1.9         | %                 |                       |
| Equilibrium, 23°C, 50% RH | --   | 1.9         | %                 | ISO 62                |
| Hardness                  | Dry  | Conditioned | Unit              | Test Method           |
| Rockwell Hardness         |      |             |                   | ASTM D785, ISO 2039-2 |
| M-Scale                   | 96   | 74          |                   |                       |
| R-Scale                   | 120  | --          |                   |                       |
| Mechanical                | Dry  | Conditioned | Unit              | Test Method           |
| Tensile Modulus (23°C)    | 8200 | 5900        | MPa               | ISO 527-2             |
| Tensile Stress            |      |             |                   |                       |
| Yield, 23°C               | --   | 116         | MPa               | ISO 527-2             |

|                                            |         |             |                   |                        |
|--------------------------------------------|---------|-------------|-------------------|------------------------|
| Break, 23°C                                | 190     | 112         | MPa               | ISO 527-2              |
| --                                         | 180     | 110         | MPa               | ASTM D638              |
| Tensile Strain                             |         |             |                   |                        |
| Yield, 23°C                                | --      | 5.5         | %                 | ISO 527-2              |
| Break                                      | 3.0     | 6.0         | %                 | ASTM D638              |
| Break, 23°C                                | 4.0     | 9.0         | %                 | ISO 527-2              |
| Flexural Modulus                           |         |             |                   |                        |
| --                                         | 8100    | 4700        | MPa               | ASTM D790              |
| 23°C                                       | 7800    | 5000        | MPa               | ISO 178                |
| Flexural Strength                          |         |             |                   |                        |
| --                                         | 290     | 175         | MPa               | ASTM D790              |
| 23°C                                       | 275     | 170         | MPa               | ISO 178                |
| Taber Abrasion Resistance<br>(1000 Cycles) | --      | 12.0        | mg                | ASTM D1044             |
| Impact                                     | Dry     | Conditioned | Unit              | Test Method            |
| Charpy Notched Impact<br>Strength          | 10      | 14          | kJ/m <sup>2</sup> | ISO 179                |
| Charpy Unnotched Impact<br>Strength        | 68      | 92          | kJ/m <sup>2</sup> | ISO 179                |
| Notched Izod Impact                        | 110     | 160         | J/m               | ASTM D256              |
| Thermal                                    | Dry     | Conditioned | Unit              | Test Method            |
| Deflection Temperature<br>Under Load       |         |             |                   |                        |
| 0.45 MPa, Unannealed                       | 260     | --          | °C                | ASTM D648, ISO 75-2/B  |
| 1.8 MPa, Unannealed                        | 250     | --          | °C                | ASTM D648              |
| 1.8 MPa, Unannealed                        | 245     | --          | °C                | ISO 75-2/A             |
| CLTE - Flow                                | 3.0E-5  | --          | cm/cm/°C          | ASTM D696              |
| Thermal Conductivity                       | 0.30    | --          | W/m/K             |                        |
| Electrical                                 | Dry     | Conditioned | Unit              | Test Method            |
| Surface Resistivity                        | 1.0E+15 | --          | ohms              | ASTM D257, IEC 60093   |
| Volume Resistivity                         |         |             |                   |                        |
| --                                         | 1.0E+15 | --          | ohms·cm           | ASTM D257              |
| 23°C                                       | 1.0E+15 | --          | ohms·cm           | IEC 60093              |
| Dielectric Strength                        | 29      | --          | kV/mm             | ASTM D149, IEC 60243-1 |
| Comparative Tracking<br>Index (3.00 mm)    | 600     | --          | V                 | IEC 60112              |
| Flammability                               | Dry     | Conditioned | Unit              | Test Method            |
| Flame Rating (0.750 mm)                    | HB      | --          |                   | UL 94                  |

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

