

**【Inquiries】**

AsahiKASEI Engineering Plastics Information Comprehensive Site  
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# AsahiKASEI



## LEONA™ 14G33

Asahi Kasei Corporation - Polyamide 66

Tuesday, March 19, 2024

### General Information

#### General

|                                          |                                                          |                                                            |                                      |
|------------------------------------------|----------------------------------------------------------|------------------------------------------------------------|--------------------------------------|
| Material Status                          | • Commercial: Active                                     |                                                            |                                      |
| Availability                             | • Africa & Middle East<br>• Asia Pacific                 | • Europe<br>• North America                                |                                      |
| Filler / Reinforcement                   | • Glass Fiber, 33% Filler by Weight                      |                                                            |                                      |
| Additive                                 | • Heat Stabilizer                                        |                                                            |                                      |
| Features AKEP website                    | • Heat Stabilized                                        |                                                            |                                      |
| Uses                                     | • Automotive Applications<br>• Automotive Under the Hood | • Electrical/Electronic Applications<br>• Structural Parts |                                      |
| Automotive Specifications                | • CHRYSLER MS-DB-41 CPN<br>1900 Color: Black             | • CHRYSLER MS-DB-41 CPN<br>2727 Color: Black               | • GM GMW15702-110032 Color:<br>Black |
| Part Marking Code (ISO11469) (ISO 11469) | • >PA66-GF33<                                            |                                                            |                                      |

#### Other Documentation

|            |                                                                                                                                                                                                              |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Literature | <ul style="list-style-type: none"> <li>• <a href="#">Moldflow Data</a></li> <li>• <a href="#">Molding Conditions</a></li> <li>• <a href="#">SDS</a></li> <li>• <a href="#">Technical Handbook</a></li> </ul> |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### ASTM & ISO Properties<sup>1</sup>

| Physical                   | Dry  | Conditioned | Unit              | Test Method           |
|----------------------------|------|-------------|-------------------|-----------------------|
| Density / Specific Gravity | 1.39 | --          | g/cm <sup>3</sup> | ASTM D792<br>ISO 1183 |
| Molding Shrinkage          |      |             |                   | Internal Method       |
| Across Flow                | 0.80 | --          | %                 |                       |
| Flow                       | 0.40 | --          | %                 |                       |
| Water Absorption           |      |             |                   | ISO 62                |
| Equilibrium, 23°C, 50% RH  | --   | 1.7         | %                 |                       |
| Mechanical                 | Dry  | Conditioned | Unit              | Test Method           |
| Tensile Modulus (23°C)     | 9800 | 7800        | MPa               | ISO 527-1             |
| Tensile Stress             |      |             |                   |                       |
| Break, 23°C                | 208  | 143         | MPa               | ISO 527-2             |
| --                         | 210  | 135         | MPa               | ASTM D638             |
| Tensile Elongation         |      |             |                   |                       |
| Break                      | 3.0  | 5.0         | %                 | ASTM D638             |
| Break, 23°C                | 4.0  | 6.0         | %                 | ISO 527-2             |

#### Disclaimer:

- Data shown are typical values obtained by proper testing methods and should not be used for specification purpose. Please use these data for selecting the most appropriate grade suitable for specific usage.

These data may be changed because of improvement in properties.

- Be sure to read the relevant SDS before handling and use, and always follow the Important Precautions.

- Do not use plastics in any of the following orally- or medically-related applications.

- Orally-related applications: any part, device or component which may come into direct oral contact or into direct contact with drinking foods or beverages.

For drinking water application, please consult Asahi Kasei Corporation.

- Medically-related applications: any part, device or component which may be used intracorporeally or which may in dialysis or other processes come into direct or indirect contact with body tissue, body fluids or transfusion fluids.

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| Mechanical                        | Dry     | Conditioned | Unit              | Test Method |
|-----------------------------------|---------|-------------|-------------------|-------------|
| Flexural Modulus                  |         |             |                   |             |
| --                                | 10400   | 6300        | MPa               | ASTM D790   |
| 23°C                              | 9600    | 6700        | MPa               | ISO 178     |
| Flexural Strength                 |         |             |                   |             |
| --                                | 325     | 210         | MPa               | ASTM D790   |
| 23°C                              | 302     | 213         | MPa               | ISO 178     |
| Taber Abrasion Resistance         |         |             |                   | ASTM D1044  |
| 1000 Cycles                       | --      | 15.0        | mg                |             |
| Impact                            | Dry     | Conditioned | Unit              | Test Method |
| Charpy Notched Impact Strength    | 13      | 16          | kJ/m <sup>2</sup> | ISO 179     |
| Charpy Unnotched Impact Strength  | 90      | 97          | kJ/m <sup>2</sup> | ISO 179     |
| Notched Izod Impact               | 130     | 170         | J/m               | ASTM D256   |
| Hardness                          | Dry     | Conditioned | Unit              | Test Method |
| Rockwell Hardness                 |         |             |                   | ASTM D785   |
| M-Scale                           | 96      | 75          |                   | ISO 2039-2  |
| R-Scale                           | 120     | --          |                   |             |
| Thermal                           | Dry     | Conditioned | Unit              | Test Method |
| Deflection Temperature Under Load |         |             |                   |             |
| 0.45 MPa, Unannealed              | 260     | --          | °C                | ASTM D648   |
| 1.8 MPa, Unannealed               | 250     | --          | °C                | ISO 75-2/B  |
| CLTE - Flow                       | 2.0E-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   |
| Volume Resistivity                |         |             |                   | IEC 60093   |
| --                                | 1.0E+15 | --          | ohms·cm           | ASTM D257   |
| 23°C                              | 1.0E+15 | --          | ohms·cm           | IEC 60093   |
| Dielectric Strength               | 33      | --          | kV/mm             | ASTM D149   |
| Comparative Tracking Index        |         |             |                   | IEC 60243-1 |
| 3.00 mm                           | 425     | --          | V                 | IEC 60112   |
| Flammability                      | Dry     | Conditioned | Unit              | Test Method |
| Flame Rating (0.75 mm)            | HB      | --          |                   | UL 94       |

### Processing Information

| Injection                         | Dry        | Unit |
|-----------------------------------|------------|------|
| Drying Temperature - Vacuum Dryer | 80 to 90   | °C   |
| Drying Time - Vacuum Dryer        | 2.0 to 3.0 | hr   |
| Processing (Melt) Temp            | 275 to 295 | °C   |
| Mold Temperature                  | 75 to 85   | °C   |

### Notes

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

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