

**【Inquiries】**

AsahiKASEI Engineering Plastics Information Comprehensive Site  
URL : <https://www.asahi-kasei-plastics.com/en/contact/>

# AsahiKASEI



## LEONA™ CR302

Asahi Kasei Corporation - Polyamide 66

Tuesday, March 19, 2024

### General Information

#### General

|                                          |                                                                                                 |
|------------------------------------------|-------------------------------------------------------------------------------------------------|
| Material Status                          | • Commercial: Active                                                                            |
| Availability                             | • Africa & Middle East • Europe<br>• Asia Pacific • North America                               |
| Filler / Reinforcement                   | • Glass Fiber\Mineral, 40% Filler by Weight                                                     |
| Features AKEP website                    | • Warpage, Low                                                                                  |
| Uses                                     | • Electrical Parts • Industrial Applications<br>• Electrical/Electronic Applications • Switches |
| Part Marking Code (ISO11469) (ISO 11469) | • >PA66-(GF+MD)40<                                                                              |

#### Other Documentation

|            |                                                                                                       |
|------------|-------------------------------------------------------------------------------------------------------|
| Literature | • <a href="#">Molding Conditions</a><br>• <a href="#">SDS</a><br>• <a href="#">Technical Handbook</a> |
|------------|-------------------------------------------------------------------------------------------------------|

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

| Physical                                      | Dry         | Conditioned | Unit              | Test Method           |
|-----------------------------------------------|-------------|-------------|-------------------|-----------------------|
| Density / Specific Gravity                    | 1.52        | --          | g/cm <sup>3</sup> | ASTM D792<br>ISO 1183 |
| Molding Shrinkage - Flow                      | 0.50 to 1.0 | --          | %                 | Internal Method       |
| Water Absorption<br>Equilibrium, 23°C, 50% RH | --          | 1.4         | %                 | ISO 62                |
| Mechanical                                    | Dry         | Conditioned | Unit              | Test Method           |
| Tensile Modulus (23°C)                        | 10000       | 7600        | MPa               | ISO 527-1             |
| Tensile Stress                                |             |             |                   |                       |
| Break, 23°C                                   | 140         | 92.0        | MPa               | ISO 527-2             |
| --                                            | 128         | 98.0        | MPa               | ASTM D638             |
| Tensile Elongation                            |             |             |                   |                       |
| Break                                         | 3.0         | 3.5         | %                 | ASTM D638             |
| Break, 23°C                                   | 2.0         | 2.5         | %                 | ISO 527-2             |
| Flexural Modulus                              |             |             |                   |                       |
| --                                            | 8800        | 5800        | MPa               | ASTM D790             |
| 23°C                                          | 9800        | 7100        | MPa               | ISO 178               |
| Flexural Strength                             |             |             |                   |                       |
| --                                            | 191         | 157         | MPa               | ASTM D790             |
| 23°C                                          | 197         | 148         | MPa               | ISO 178               |

#### 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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| Impact                            | Dry | Conditioned | Unit              | Test Method             |
|-----------------------------------|-----|-------------|-------------------|-------------------------|
| Charpy Notched Impact Strength    | 4.0 | 5.0         | kJ/m <sup>2</sup> | ISO 179                 |
| Charpy Unnotched Impact Strength  | 38  | 46          | kJ/m <sup>2</sup> | ISO 179                 |
| Notched Izod Impact               | 36  | 39          | J/m               | ASTM D256               |
| Hardness                          | Dry | Conditioned | Unit              | Test Method             |
| Rockwell Hardness (M-Scale)       | 90  | --          |                   | ASTM D785<br>ISO 2039-2 |
| Thermal                           | Dry | Conditioned | Unit              | Test Method             |
| Deflection Temperature Under Load |     |             |                   |                         |
| 0.45 MPa, Unannealed              | 250 | --          | °C                | ASTM D648               |
| 0.45 MPa, Unannealed              | 260 | --          | °C                | ISO 75-2/B              |
| 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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