

**【Inquiries】**

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

# AsahiKASEI



## LEONA™ FR200

Asahi Kasei Corporation - Polyamide 66/6 Copolymer

Tuesday, March 19, 2024

### General Information

#### General

|                                          |                                          |                                                    |
|------------------------------------------|------------------------------------------|----------------------------------------------------|
| Material Status                          | • Commercial: Active                     |                                                    |
| Availability                             | • Africa & Middle East<br>• Asia Pacific | • Europe<br>• North America                        |
| Additive                                 | • Flame Retardant                        |                                                    |
| Features AKEP website                    | • Flame Retardant                        | • Halogen Free                                     |
| Uses                                     | • Connectors<br>• Electrical Parts       | • Electrical/Electronic Applications<br>• Switches |
| Part Marking Code (ISO11469) (ISO 11469) | • >PA66/6-FR(30)<                        |                                                    |

#### 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                    | 1.16       | --          | g/cm <sup>3</sup> | ASTM D792<br>ISO 1183 |
| Molding Shrinkage - Flow                      | 1.3 to 2.0 | --          | %                 | Internal Method       |
| Water Absorption<br>Equilibrium, 23°C, 50% RH | --         | 2.4         | %                 | ISO 62                |
| Mechanical                                    | Dry        | Conditioned | Unit              | Test Method           |
| Tensile Modulus (23°C)                        | 3500       | 1100        | MPa               | ISO 527-1             |
| Tensile Stress                                |            |             |                   |                       |
| Yield, 23°C                                   | 75.0       | 44.0        | MPa               | ISO 527-2             |
| Break, 23°C                                   | 69.0       | --          | MPa               | ISO 527-2             |
| --                                            | 79.0       | 47.0        | MPa               | ASTM D638             |
| Tensile Strain                                |            |             |                   |                       |
| Yield, 23°C                                   | 3.5        | 24          | %                 | ISO 527-2             |
| Break                                         | 25         | 80          | %                 | ASTM D638             |
| Break, 23°C                                   | 10         | > 100       | %                 | ISO 527-2             |
| Flexural Modulus                              |            |             |                   |                       |
| --                                            | 2900       | 1100        | MPa               | ASTM D790             |
| 23°C                                          | 2900       | 1000        | 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.

## LEONA™ FR200

### Asahi Kasei Corporation - Polyamide 66/6 Copolymer

| Mechanical                        | Dry      | Conditioned | Unit              | Test Method              |
|-----------------------------------|----------|-------------|-------------------|--------------------------|
| Flexural Strength                 |          |             |                   |                          |
| --                                | 118      | 44.0        | MPa               | ASTM D790                |
| 23°C                              | 117      | 37.2        | MPa               | ISO 178                  |
| Taber Abrasion Resistance         |          |             |                   | ASTM D1044               |
| 1000 Cycles                       | --       | 8.00        | mg                |                          |
| Impact                            | Dry      | Conditioned | Unit              | Test Method              |
| Charpy Notched Impact Strength    | 4.0      | 11          | kJ/m <sup>2</sup> | ISO 179                  |
| Charpy Unnotched Impact Strength  | No Break | No Break    |                   | ISO 179                  |
| Notched Izod Impact               | 29       | 120         | J/m               | ASTM D256                |
| Hardness                          | Dry      | Conditioned | Unit              | Test Method              |
| Rockwell Hardness                 |          |             |                   | ASTM D785                |
| M-Scale                           | 80       | --          |                   | ISO 2039-2               |
| R-Scale                           | 118      | 90          |                   |                          |
| Thermal                           | Dry      | Conditioned | Unit              | Test Method              |
| Deflection Temperature Under Load |          |             |                   |                          |
| 0.45 MPa, Unannealed              | 209      | --          | °C                | ASTM D648                |
| 0.45 MPa, Unannealed              | 203      | --          | °C                | ISO 75-2/B               |
| 1.8 MPa, Unannealed               | 66.0     | --          | °C                | ASTM D648                |
| 1.8 MPa, Unannealed               | 62.0     | --          | °C                | ISO 75-2/A               |
| CLTE - Flow                       | 8.0E-5   | --          | cm/cm/°C          | ASTM D696                |
| Specific Heat                     | 1670     | --          | J/kg/°C           |                          |
| Thermal Conductivity              | 0.20     | --          | W/m/K             |                          |
| Electrical                        | Dry      | Conditioned | Unit              | Test Method              |
| Surface Resistivity               | 1.0E+13  | --          | ohms              | ASTM D257<br>IEC 60093   |
| Volume Resistivity                |          |             |                   |                          |
| --                                | 1.0E+14  | --          | ohms·cm           | ASTM D257                |
| 23°C                              | 1.0E+14  | --          | ohms·cm           | IEC 60093                |
| Dielectric Strength               | 19       | --          | kV/mm             | ASTM D149<br>IEC 60243-1 |
| Comparative Tracking Index        |          |             |                   | IEC 60112                |
| 3.00 mm                           | 600      | --          | V                 |                          |
| Flammability                      | Dry      | Conditioned | Unit              | Test Method              |
| Flame Rating (0.75 mm)            | V-0      | --          |                   | UL 94                    |
| Glow Wire Flammability Index      |          |             |                   | IEC 60695-2-12           |
| 3.0 mm                            | 960      | --          | °C                |                          |
| Oxygen Index                      | 32       | --          | %                 | ASTM D2863               |

### 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            | 250 to 260 | °C   |
| Mold Temperature                  | 75 to 85   | °C   |

#### 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.

## LEONA™ FR200

### Asahi Kasei Corporation - Polyamide 66/6 Copolymer

#### Notes

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



#### 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.