

【Inquiries】

AsahiKASEI Engineering Plastics Information Comprehensive Site

URL : <https://www.asahi-kasei-plastics.com/en/contact/>

AsahiKASEI



LEONA™ MR001

Asahi Kasei Corporation - Polyamide 66

Tuesday, March 19, 2024

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Mineral, 40% Filler by Weight		
Additive	• Heat Stabilizer		
Features AKEP website	• Heat Stabilized	• Warpage, Low	
Uses	• Electrical Parts • Electrical/Electronic Applications	• Industrial Applications • Structural Parts	
Part Marking Code (ISO11469) (ISO 11469)	• >PA66-MD40<		

Other Documentation

Literature	• Moldflow Data • Molding Conditions • SDS • Technical Handbook
------------	--

ASTM & ISO Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.52	--	g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage - Flow	1.0 to 1.1	--	%	Internal Method
Water Absorption Equilibrium, 23°C, 50% RH	--	1.5	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	5900	3400	MPa	ISO 527-1
Tensile Stress				
Yield, 23°C	--	59.0	MPa	ISO 527-2
Break, 23°C	93.0	58.0	MPa	ISO 527-2
--	98.0	67.0	MPa	ASTM D638
Tensile Strain				
Yield, 23°C	--	14	%	ISO 527-2
Break	6.0	7.0	%	ASTM D638
Break, 23°C	5.5	19	%	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.

LEONA™ MR001

Asahi Kasei Corporation - Polyamide 66

Mechanical	Dry	Conditioned	Unit	Test Method
Flexural Modulus				
--	5600	3300	MPa	ASTM D790
23°C	5800	3100	MPa	ISO 178
Flexural Strength				
--	157	98.0	MPa	ASTM D790
23°C	150	84.0	MPa	ISO 178
Taber Abrasion Resistance				ASTM D1044
1000 Cycles	--	22.0	mg	
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	3.0	3.0	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	62	130	kJ/m ²	ISO 179
Notched Izod Impact	34	39	J/m	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	85	60		ISO 2039-2
R-Scale	120	108		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	240	--	°C	ASTM D648
0.45 MPa, Unannealed	229	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	160	--	°C	ASTM D648
1.8 MPa, Unannealed	118	--	°C	ISO 75-2/A
CLTE - Flow	6.0E-5	--	cm/cm/°C	ASTM D696
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+13	--	ohms	ASTM D257 IEC 60093
Volume Resistivity				
--	1.0E+14	--	ohms·cm	ASTM D257
23°C	1.0E+14	--	ohms·cm	IEC 60093
Dielectric Strength	22	--	kV/mm	ASTM D149 IEC 60243-1
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

¹ 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.