

【Inquiries】

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

AsahiKASEI



LEONA™ 14G25

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	• Glass Fiber, 25% Filler by Weight
Additive	• Heat Stabilizer
Features AKEP website	• Heat Stabilized
Uses	• Automotive Applications • Automotive Under the Hood • Electrical/Electronic Applications • Structural Parts
Automotive Specifications	• GM GMW3038P-PA66-GF25H Color: Black • GM GMW3038P-PA66-GF25H Color: Natural • GM GMW3038P-PA66-GF25J Color: Black • GM GMW3038P-PA66-GF25J Color: Natural
Part Marking Code (ISO11469) (ISO 11469)	• >PA66-GF25<

Other Documentation

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

ASTM & ISO Properties ¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.32	--	g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.90	--	%	
Flow	0.50	--	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	--	1.9	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	8200	5900	MPa	ISO 527-1
Tensile Stress				
Yield, 23°C	--	116	MPa	ISO 527-2
Break, 23°C	190	112	MPa	ISO 527-2
--	180	110	MPa	ASTM D638

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™ 14G25

Asahi Kasei Corporation - Polyamide 66

Mechanical	Dry	Conditioned	Unit	Test Method
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				ASTM D1044
1000 Cycles	--	12.0	mg	
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	10	14	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	68	92	kJ/m ²	ISO 179
Notched Izod Impact	110	160	J/m	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785
M-Scale	96	74		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
1.8 MPa, Unannealed	245	--	°C	ASTM D648
				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 Index				IEC 60112
3.00 mm	425	--	V	
Flammability	Dry	Conditioned	Unit	Test Method
Flame Rating (0.75 mm)	HB	--		UL 94

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™ 14G25**Asahi Kasei Corporation - Polyamide 66****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.