

【Inquiries】

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

AsahiKASEI



LEONA™ SG105

Asahi Kasei Corporation - Polyamide 66 + PA 6I

Tuesday, March 19, 2024

General Information

General

Material Status	• Commercial: Active ¹		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight		
Features AKEP website	• Good appearance	• High Strength in Wet	
Uses	• Automotive Applications	• Automotive Interior Parts	• Industrial Applications
Part Marking Code (ISO11469) (ISO 11469)	• >PA66+6I-GF50<		

Other Documentation

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

ASTM & ISO Properties ²

Physical	Dry	Conditioned	Unit	Test Method
Density	1.59	--	g/cm ³	ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.50	--	%	
Flow	0.20	--	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	--	1.2	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	18000	18000	MPa	ISO 527-1
Tensile Stress (Break, 23°C)	270	230	MPa	ISO 527-2
Tensile Strain (Break, 23°C)	2.5	2.5	%	ISO 527-2
Flexural Modulus (23°C)	16000	15000	MPa	ISO 178
Flexural Stress (23°C)	380	350	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	17	16	kJ/m ²	ISO 179
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness (M-Scale)	103	100		ISO 2039-2

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™ SG105

Asahi Kasei Corporation - Polyamide 66 + PA 6I

Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	250	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	240	--	°C	ISO 75-2/A
CLTE				ASTM D696
Flow : -30 to 130°C	1.2E-5	--	cm/cm/°C	
Transverse : -30 to 130°C	7.8E-5	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	1.0E+16	--	ohms	IEC 60093
Volume Resistivity	1.0E+15	--	ohms·cm	IEC 60093
Electric Strength	38	--	kV/mm	IEC 60243-1
Comparative Tracking Index	600	--	V	IEC 60112

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	280 to 300	°C
Mold Temperature	100 to 120	°C

Notes

¹ All data is provisional.

² 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.