

【Inquiries】

AsahiKASEI Engineering Plastics Information Comprehensive Site
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AsahiKASEI



LEONA™ 90G50

Asahi Kasei Corporation - Polyamide 66/6I Copolymer

Wednesday, March 20, 2024

General Information

General

Material Status	• Commercial: Active
Availability	• Africa & Middle East • Asia Pacific • Europe • North America
Filler / Reinforcement	• Glass Fiber, 50% Filler by Weight
Features AKEP website	• Flow, High • Good appearance
Uses	• Automotive Applications • Fabrics • Industrial Applications • Structural Parts
Automotive Specifications	• CHRYSLER MS-DB-41 CPN 5164 Color: Natural
Part Marking Code (ISO11469) (ISO 11469)	• >PA66/6I-GF50<

Other Documentation

- Literature
- [Molding Conditions](#)
 - [SDS](#)
 - [Technical Handbook](#)

ASTM & ISO Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.58	--	g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage				Internal Method
Across Flow	0.50	--	%	
Flow	0.20	--	%	
Water Absorption				ISO 62
Equilibrium, 23°C, 50% RH	--	1.2	%	

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.

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Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	18000	17000	MPa	ISO 527-1
Tensile Stress				
Break, 23°C	250	200	MPa	ISO 527-2
--	235	196	MPa	ASTM D638
Tensile Elongation				
Break	2.5	3.0	%	ASTM D638
Break, 23°C	2.0	3.0	%	ISO 527-2
Flexural Modulus				
--	15500	12100	MPa	ASTM D790
23°C	14200	12000	MPa	ISO 178
Flexural Strength				
--	373	304	MPa	ASTM D790
23°C	355	239	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	16	16	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	88	84	kJ/m ²	ISO 179
Notched Izod Impact	130	130	J/m	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				
M-Scale	90	--		ASTM D785
R-Scale	120	--		ASTM D785 ISO 2039-2
M-Scale	100	--		ISO 2039-2
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	240	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	225	--	°C	ASTM D648 ISO 75-2/A
CLTE - Flow	2.0E-5	--	cm/cm/°C	ASTM D696
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	85 to 95	°C

Notes

¹ Typical properties: these are not to be construed as specifications.

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