

【Inquiries】

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

AsahiKASEI



LEONA™ 1300S

Asahi Kasei Corporation - Polyamide 66

Wednesday, March 20, 2024

General Information

General

Material Status	• Commercial: Active		
Availability	• Africa & Middle East • Asia Pacific	• Europe • North America	
Uses	• Automotive Applications • Connectors	• Consumer Applications • Fittings	
Part Marking Code (ISO11469) (ISO 11469)	• >PA66<		

Other Documentation

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

ASTM & ISO Properties¹

Physical	Dry	Conditioned	Unit	Test Method
Density / Specific Gravity	1.14	--	g/cm ³	ASTM D792 ISO 1183
Molding Shrinkage - Flow	1.3 to 2.0	--	%	Internal Method
Water Absorption Equilibrium, 23°C, 50% RH	--	2.5	%	ISO 62
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus (23°C)	3000	1200	MPa	ISO 527-1
Tensile Stress				
Yield, 23°C	82.0	52.0	MPa	ISO 527-2
--	79.0	57.0	MPa	ASTM D638
Tensile Strain				
Yield, 23°C	4.0	24	%	ISO 527-2
Break	50	250	%	ASTM D638
Break, 23°C	--	> 100	%	ISO 527-2
Flexural Modulus				
--	2800	1200	MPa	ASTM D790
23°C	2700	1100	MPa	ISO 178
Flexural Strength				
--	118	54.0	MPa	ASTM D790
23°C	113	42.0	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™ 1300S

Asahi Kasei Corporation - Polyamide 66

Mechanical	Dry	Conditioned	Unit	Test Method
Taber Abrasion Resistance 1000 Cycles	--	7.00	mg	ASTM D1044
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength	6.0	15	kJ/m ²	ISO 179
Charpy Unnotched Impact Strength	No Break	No Break		ISO 179
Notched Izod Impact	39	150	J/m	ASTM D256
Hardness	Dry	Conditioned	Unit	Test Method
Rockwell Hardness				ASTM D785 ISO 2039-2
M-Scale	80	55		
R-Scale	120	108		
Thermal	Dry	Conditioned	Unit	Test Method
Deflection Temperature Under Load				
0.45 MPa, Unannealed	230	--	°C	ASTM D648
0.45 MPa, Unannealed	190	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	70.0	--	°C	ASTM D648 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 IEC 60093
Volume Resistivity				
--	1.0E+14	--	ohms·cm	ASTM D257
23°C	1.0E+14	--	ohms·cm	IEC 60093
Dielectric Strength	20	--	kV/mm	ASTM D149 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-2	--		UL 94
Glow Wire Flammability Index				IEC 60695-2-12
3.0 mm	960	--	°C	
Oxygen Index	26	--	%	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	270 to 290	°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.