

LEONA™ SG and 90G

Polyamide with Excellent Surface Quality & Processability

Proposal as an Alternative to Metal Parts

Product Overview

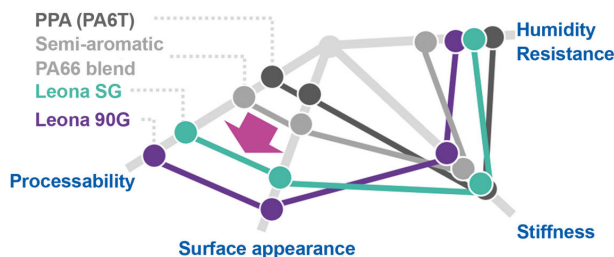
LEONA™ SG and 90G are Asahi Kasei's polyamide (PA) family ideal for metal replacement. Even with a high glass fiber content, the material features a superior surface quality and gloss at shorter cycle times. This is achieved without additional surface treatment or coating.

Features of LEONA™ SG and 90G

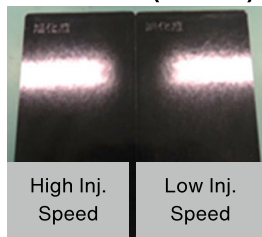
LEONA™ SG: alloyed grade of PA66 with semi-aromatic PA which offers an excellent inherent mechanical strength even under moisture. Available in grades reinforced with 40%, 50% and 60% glass fiber.

LEONA™ 90G: copolymer of PA66 and semi-aromatic PA which has an excellent flowability and superior UV resistance. Available in grades reinforced with 33%, 50% and 60% glass fiber.

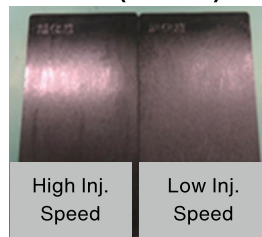
Properties of LEONA™ SG and 90G



LEONA™ SG (GF 60%)



PA66 (GF 60%)



Processing temp.: 300 °C, Mold temp.: 130 °C

Item	Test Method	Unit	SG105 PA66+6I-GF50		90G50 PA66/6I-GF50	
			Dry	Cond.	Dry	Cond.
Density	ISO 1183	g/cm ³	1.59		1.58	
Water Absorption	ISO 62 (24hr, 23°C)	%	1.2		1.2	
Tensile Stress	ISO 527	MPa	270	230	250	200
Strain at Break	ISO 527	%	2.5	2.5	2.0	3.0
Flexural Modulus	ISO 178	GPa	16.0	15.0	14.2	12.0
Notched Charpy	ISO 179	kJ/m ²	17	16	16	16
DTUL (1.8MPa)	ISO 75	°C	240		225	
Processing Temperature		°C	280 to 300		275 to 295	
Mold Temperature		°C	100 to 120		85 to 95	

Application Fields

- Automotive applications for metal replacement such as mirror brackets, wiper arms and pedal brackets
- General applications such as motor housings, window fittings, metal hinges, etc.

Further Information

Visit: <https://www.asahi-kasei-plastics.com/en/products/leona/>

Benefits for Customers

- Weight reduction
- Excellent surface appearance
- Good processability

