Long Fiber cotton Reinforced Thermoplastics (LFT)

PLASTRON®

PA12-GF50-01(L9)

F02

GF50% Filled Grades

Daicel Corporation

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Property : GF50% Filled Grades
Characteristic : Impact Resistant, Low Water Absorption
ISO Marking Code : >PA-GF50<
Test Method : ISO11469(JIS K6999)

Physical properties

Density		1.46	g/cm³	ISO 1183

Mechanical properties

Tensile strength		210	MPa	ISO 527-1,2
Strain at break		2.5	%	ISO 527-1,2
Tensile modulus		15900	MPa	ISO 527-1,2
Flexural strength		320	MPa	ISO 178
Flexural modulus		12500	MPa	ISO 178
Charpy notched impact strength	23℃	50	kJ/m²	ISO 179/1eA
Charpy notched impact strength	-30℃	45	kJ/m²	ISO 179/1eA
Rockwell hardness	M(Scale)	75		ISO2039-2
Tensile strength (0.4% moist)		180	MPa	ISO 527-1,2
Strain at break (0.4% moist)		2.4	%	ISO 527-1,2
Flexural strength (0.4% moist)		280	MPa	ISO 178
Flexural modulus (0.4% moist)		11500	MPa	ISO 178
Charpy notched impact strength (0.4% moist)	23℃	45	kJ/m²	ISO 179/1eA
Rockwell hardness (0.4% moist)	M(Scale)	65		ISO2039-2

Termal properties

Temperature of deflection under load	1.8MPa	178	℃	ISO 75-1,2

All figures in the table are the typical values of the material and not the minimum values of the material specifications.

Standard molding conditions

Preliminary drying	Cylinder temperature (℃)				Screw rotational speed (rpm)	Back pressure (MPa)	Mold temperature (℃)
	Nozzle	Front section	Center section	Rear section			
3-5hrs 80-100℃	220-260	230-270	230-270	220-260	40-60	5-10	60-80

【Alert Notes】

· Cool the purged plastics lumps down in water bath, they may possibly ignite due to their high temperature.

NOTES TO USERS

- All property values shown in this brochure are the typical values obtained under conditions prescribed by applicable standards and test methods.
- This brochure has been prepared based on our own experiences and laboratory test data, and therefore all data shown here are not always applicable to parts used under different conditions. We do not guarantee that these data are directly applicable to the application conditions of users and we ask each user to make his own decision on the application.
- It is the users' responsibility to investigate patent rights, service life and potentiality of applications introduced in this brochure. Materials we supply are not intended for the implant applications in the medical and dental fields, and therefore are not recommended for such uses.
- For all works done properly, it is advised to refer to appropriate technical catalogs for specific material processing.
- For safe handling of materials we supply, it is advised to refer to the Safety Data Sheet "SDS" of the proper material.
- This brochure is edited based on reference literature, information and data available to us at the time of creation. The contents of this brochure are subject to change without notice upon achievement of new data.
- Please contact our office for any questions about products we supply, descriptive literatures or any description in this brochure.

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