

LNP* Stat-Kon* DDF029

Polycarbonate

SABIC Innovative Plastics Asia Pacific

Product Description

LNP STAT-KON* DDF029 is a compound based on Polycarbonate resin containing Carbon Powder, Flame Retardant, Glass Fiber. Added features of this material include: Electrically Conductive.

Also known as: LNP* Stat-kon* Compound DF-FR

Product reorder name: DDF029

General

Material Status	• Commercial: Active
Availability	• Asia Pacific
Processing Method	• Injection Molding

Physical	Nominal Value	Unit	Test Method
Specific Gravity	1.37	g/cm ³	ASTM D792
Molding Shrinkage			
Flow: 24 hr	0.40	%	ASTM D955
Across Flow: 24 hr	0.50	%	ASTM D955
Across Flow: 24 hr	0.49	%	ISO 294-4
Flow: 24 hr	0.44	%	ISO 294-4
Water Absorption			
24 hr, 50% RH	0.11	%	ASTM D570
Equilibrium, 23°C, 50% RH	0.20	%	ISO 62

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus			
-- ²	4480	MPa	ASTM D638
--	4600	MPa	ISO 527-2/1
Tensile Strength			
Break	81.9	MPa	ASTM D638
Break	81.5	MPa	ISO 527-2
Tensile Elongation			
Break	2.9	%	ASTM D638
Break	2.8	%	ISO 527-2
Flexural Modulus			
--	4410	MPa	ASTM D790
--	4800	MPa	ISO 178
Flexural Strength			
--	133	MPa	ASTM D790
--	135	MPa	ISO 178

Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			
23°C	53.4	J/m	ASTM D256
23°C ³	6.60	kJ/m ²	ISO 180/1A
Unnotched Izod Impact			
23°C	443	J/m	ASTM D4812
23°C ³	32.8	kJ/m ²	ISO 180/1U
Instrumented Dart Impact			
23°C, Energy at Peak Load	7.30	J	ASTM D3763
--	2.27	J	ISO 6603-2

Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load			
0.45 MPa, Unannealed, 3.20 mm	141	°C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	136	°C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁴	135	°C	ISO 75-2/Af

Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+5 to 1.0E+10	ohms	ASTM D257

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Injection	Nominal Value	Unit
Drying Temperature	121	°C
Drying Time	4.0	hr
Suggested Max Moisture	0.020	%
Rear Temperature	293 to 304	°C
Middle Temperature	310 to 321	°C
Front Temperature	321 to 332	°C
Processing (Melt) Temp	304 to 327	°C
Mold Temperature	82.2 to 110	°C
Back Pressure	0.172 to 0.344	MPa
Screw Speed	30 to 60	rpm

Notes

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

² 50 mm/min

³ 80*10*4

⁴ 80*10*4 mm