



LNP™ STAT-KON™ Compound QEL329

Americas: COMMERCIAL

Also known as: LNP™ STAT-KON™ Compound QCL-4032 FR-1

Product reorder name: QEL329

LNP STAT-KON™ QEL329 is a compound based on Nylon 6/10 resin containing 10% Carbon Fiber, 15% PTFE. Added features of this material include: Electrically Conductive, Wear Resistant, Flame Retardant.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	1190	kgf/cm ²	ASTM D 638
Tensile Strain, break	2.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	89900	kgf/cm ²	ASTM D 638
Flexural Stress	1750	kgf/cm ²	ASTM D 790
Flexural Modulus	61100	kgf/cm ²	ASTM D 790
Tensile Stress, break	126	MPa	ISO 527
Tensile Strain, break	2.4	%	ISO 527
Tensile Modulus, 1 mm/min	9580	MPa	ISO 527
Flexural Stress	185	MPa	ISO 178
Flexural Modulus	7010	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	38	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	3	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	83	cm-kgf	ASTM D 3763
Multiaxial Impact	95	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	29	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	4	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 1.82 MPa, 3.2mm, unannealed	164	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.8E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	9.36E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.81E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	9.47E-05	1/°C	ISO 11359-2



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	193	°C	ISO 75/Af
PHYSICAL			
Density	1.44	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.13	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.7 - 0.9	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	0.2 - 0.4	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	0.7 - 0.8	%	ISO 294
Wear Factor Washer	63	10 ⁻¹⁰ in ⁵ -min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.47	-	ASTM D 3702 Modified
Static COF	0.37	-	ASTM D 3702 Modified
Density	1.44	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.13	%	ISO 62
ELECTRICAL			
Volume Resistivity	1.E+03 - 1.E+05	Ohm-cm	ASTM D 257
Surface Resistivity	1.E+03 - 1.E+05	Ohm	ASTM D 257
FLAME CHARACTERISTICS			
UL Compliant, 94V-0 Flame Class Rating (3)(4)	1.5	mm	UL 94 by SABIC-IP



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.12 - 0.2	%
Melt Temperature	270 - 275	°C
Front - Zone 3 Temperature	270 - 280	°C
Middle - Zone 2 Temperature	260 - 270	°C
Rear - Zone 1 Temperature	250 - 260	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm