LNP™ LUBRICOMP™ COMPOUND QFL17RS

QFL-4017 ER HS

DESCRIPTION

LNP LUBRICOMP* QFL17RS is a compound based on Nylon 6/10 resin containing 35% Glass Fiber, 5% PTFE. Added features of this material include: Easy Release, Heat Stabilized, Wear Resistant.

TYPICAL PROPERTY VALUES

Revision 20191219

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break	192	MPa	ASTM D 638
Tensile Strain, break	3.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	11920	MPa	ASTM D 638
Flexural Stress	282	MPa	ASTM D 790
Flexural Modulus	9030	MPa	ASTM D 790
Tensile Stress, break	183	MPa	ISO 527
Tensile Strain, break	3.4	%	ISO 527
Tensile Modulus, 1 mm/min	10600	MPa	ISO 527
Flexural Stress	273	MPa	ISO 178
Flexural Modulus	9800	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1372	J/m	ASTM D 4812
Izod Impact, notched, 23°C	176	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	11	J	ASTM D 3763
Multiaxial Impact	4	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	88	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	16	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	222	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	214	°C	ASTM D 648
CTE, -40°C to 40°C, flow	4.32E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	5.94E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	4.48E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	5.98E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	208	°C	ISO 75/Af
PHYSICAL			
Density	1.42	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.18	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.7	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.15	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.73	%	ISO 294
Density	1.42	g/cm³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.3	%	ISO 62

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PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
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	

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