

LNP™ THERMOCOMP™ COMPOUND 2X98703

PDX-FP-E-98703
REGION AMERICAS

DESCRIPTION

LNP THERMOCOMP 2X98703 is a compound based on ETFE Copolymer resin containint Proprietary Filler(s).

TYPICAL PROPERTY VALUES

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	101	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	98	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5.6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	5.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	14180	MPa	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	143	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	10600	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	95	MPa	ISO 527
Tensile Stress, break, 5 mm/min	88	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	5	%	ISO 527
Tensile Strain, break, 5 mm/min	5.5	%	ISO 527
Tensile Modulus, 1 mm/min	11220	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	135	MPa	ISO 178
Flexural Modulus, 2 mm/min	10440	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	481	J/m	ASTM D 4812
Izod Impact, notched, 23°C	411	J/m	ASTM D 256
Multiaxial Impact	8	J	ISO 6603
Instrumented Impact Total Energy, 23°C	20	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	88	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	34	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	248	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	214	°C	ASTM D 648

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
CTE, -40°C to 40°C, flow	1.7E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ASTM E 831
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	239	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	187	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.73	-	ASTM D 792
Density	1.73	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.01	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.4	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.01	%	ISO 62
INJECTION MOLDING			
Drying Temperature	120 – 150	°C	
Drying Time	4	hrs	
Melt Temperature	315	°C	
Front - Zone 3 Temperature	325 – 340	°C	
Middle - Zone 2 Temperature	300 – 325	°C	
Rear - Zone 1 Temperature	280 – 300	°C	
Mold Temperature	90 – 120	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	