



LNP™ THERMOCOMP™ Compound Lexan_JK500

Americas: COMMERCIAL

LNP™ Thermocomp™ Lexan_JK500 compound is a 10% GR, ECO conforming FR, PC+ABS for thinwall molding applications.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	690	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	690	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	5	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	5	%	ASTM D 638
Tensile Modulus, 5 mm/min	49200	kgf/cm ²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	1190	kgf/cm ²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	44200	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	70	MPa	ISO 527
Tensile Stress, break, 5 mm/min	70	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	2.1	%	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	5250	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	115	MPa	ISO 178
Flexural Stress, break, 2 mm/min	115	MPa	ISO 178
Flexural Modulus, 2 mm/min	4590	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	32	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	138	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	21	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m ²	ISO 180/1A
THERMAL			
Vicat Softening Temp, Rate B/50	110	°C	ASTM D 1525



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	96	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	88	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	93	°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	7.2E-05	1/°C	ASTM E 831
CTE, 23°C to 80°C, flow	4.3E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	8.3E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	100	°C	ISO 306
Relative Temp Index, Elec	60	°C	UL 746B
Relative Temp Index, Mech w/impact	60	°C	UL 746B
Relative Temp Index, Mech w/o impact	60	°C	UL 746B
PHYSICAL			
Specific Gravity	1.27	-	ASTM D 792
Mold Shrinkage, flow, 3.2 mm (5)	0.1 - 0.25	%	SABIC Method
Mold Shrinkage, xflow, 3.2 mm (5)	0.3 - 0.45	%	SABIC Method
Melt Flow Rate, 260°C/2.16 kgf	20	g/10 min	ASTM D 1238
Melt Flow Rate, 300°C/1.2 kgf	33	g/10 min	ASTM D 1238
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	0.99	mm	UL 94



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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80 - 90	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	24	hrs
Melt Temperature	270 - 310	°C
Nozzle Temperature	270 - 300	°C
Front - Zone 3 Temperature	270 - 300	°C
Middle - Zone 2 Temperature	270 - 290	°C
Rear - Zone 1 Temperature	260 - 275	°C
Mold Temperature	50 - 95	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	35 - 75	rpm
Shot to Cylinder Size	40 - 60	%
Vent Depth	0.038 - 0.076	mm