



LNP™ THERMOCOMP™ Compound WX05456

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound 9760

Product reorder name: WX05456

LNP THERMOCOMP WX05456 is a compound based on PBT containing Mineral.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, break	490	kgf/cm ²	ASTM D 638
Tensile Strain, break	1.8	%	ASTM D 638
Tensile Modulus, 50 mm/min	43000	kgf/cm ²	ASTM D 638
Flexural Stress	920	kgf/cm ²	ASTM D 790
Flexural Modulus	44700	kgf/cm ²	ASTM D 790
Tensile Stress, break	47	MPa	ISO 527
Tensile Strain, break	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	4650	MPa	ISO 527
Flexural Stress	88	MPa	ISO 178
Flexural Modulus	4200	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	20	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	2	cm-kgf/cm	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	73	cm-kgf	ASTM D 3763
Multiaxial Impact	6	cm-kgf	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	15	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	2	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	171	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	71	°C	ASTM D 648
CTE, -40°C to 40°C, flow	5.81E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	6.67E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	5.81E-05	1/°C	ISO 11359-2



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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -40°C to 40°C, xflow	6.68E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	163	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	82	°C	ISO 75/Af
PHYSICAL			
Density	1.546	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.05	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	1.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	1.5	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs (5)	1.47	%	ISO 294
Mold Shrinkage, xflow, 24 hrs (5)	1.51	%	ISO 294
Density	1.54	g/cm ³	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.07	%	ISO 62
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	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	250 - 275	°C
Front - Zone 3 Temperature	265 - 275	°C
Middle - Zone 2 Temperature	250 - 260	°C
Rear - Zone 1 Temperature	230 - 245	°C
Mold Temperature	80 - 95	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm