LNP™ THERMOCOMP™ Compound EX93452

Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound PDX-E-93452
Product reorder name: EX93452

LNP THERMOCOMP™ EX93452 is a compound based on Polyetherimide resin containing Proprietary Fillers. Added features of this material include: Electrically Conductive.

TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	2180	kgf/cm²	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	1.5	%	ASTM D 638
Tensile Modulus, 50 mm/min	202500	kgf/cm²	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	2860	kgf/cm²	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	168200	kgf/cm²	ASTM D 790
Tensile Stress, break, 5 mm/min	205	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.4	%	ISO 527
Tensile Modulus, 1 mm/min	18500	MPa	ISO 527
Flexural Stress	283	MPa	ISO 178
Flexural Modulus, 2 mm/min	17060	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	47	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	5	cm-kgf/cm	ASTM D 256
Multiaxial Impact	31	cm-kgf	ISO 6603
Instrumented Impact Total Energy, 23°C	112	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	29	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	219	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	214	°C	ASTM D 648
CTE, -30°C to 30°C, flow	2.9E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	2.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	219	°C	ISO 75/Bf

(1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.

(2) Only typical data for selection purposes. Not to be used for part or tool design.
(3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
(4) Internal measurements according to UL standards.
(5) Measurements made from laboratory test coupon. Actual shrinkage may vary outside of range due to differences in processing conditions, equipment, part geometry and tool design. It is recommended that mold shrinkage studies be performed with surrogate or legacy tooling prior to cutting tools for new molded article.
(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

Source GMD, last updated:

PLEASE CONTACT YOUR LOCAL SALES OFFICE FOR AVAILABILITY IN YOUR AREA.

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TYPICAL PROPERTIES[1]	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	214	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.39	-	ASTM D 792
Density	1.39	g/cm³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.14	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.02 - 0.04	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.24	%	ISO 62

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	360 - 365	°C
Front - Zone 3 Temperature	365 - 375	°C
Middle - Zone 2 Temperature	355 - 365	°C
Rear - Zone 1 Temperature	345 - 355	°C
Mold Temperature	120 - 150	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	60 - 100	rpm

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