

LNP* Thermocomp* Compound TH0450C

Americas: COMMERCIAL

Also known as: HSG-T-0450C EXP
Product Reorder Name: TH0450C

LNP* Thermocomp* TH0450C is a compound based on Polyurethane resin containing High Specific Gravity Filler. Added features of this material include: High Specific Gravity.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	15	MPa	ASTM D 638
Tensile Stress, break	13	MPa	ASTM D 638
Tensile Strain, yield	8.5	%	ASTM D 638
Tensile Strain, break	27.3	%	ASTM D 638
Tensile Modulus, 50 mm/min	1330	MPa	ASTM D 638
Flexural Stress	20	MPa	ASTM D 790
Flexural Modulus	990	MPa	ASTM D 790
Tensile Stress, yield	16	MPa	ISO 527
Tensile Stress, break	13	MPa	ISO 527
Tensile Strain, yield	8	%	ISO 527
Tensile Strain, break	23.1	%	ISO 527
Tensile Modulus, 1 mm/min	1170	MPa	ISO 527
Flexural Stress	21	MPa	ISO 178
Flexural Modulus	1130	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	1100	J/m	ASTM D 4812
Izod Impact, notched, 23°C	117	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	17	J	ASTM D 3763
Multiaxial Impact	12	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C	74	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m ²	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	46	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.74E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	8.46E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.81E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	8.46E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	46	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	4.5	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.1	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.6	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.6	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.57	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.57	%	ISO 294
Density	4.5	g/cm ³	ISO 1183

[Processing](#)

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR [\(LOCAL SALES OFFICE\)](#) FOR AVAILABILITY IN YOUR REGION

- (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.

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