



LNP™ THERMOCOMP™ Compound RX12402

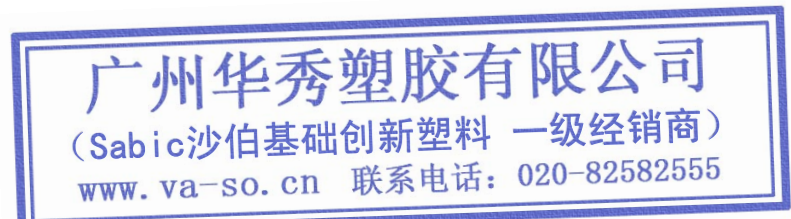
Americas: COMMERCIAL

Also known as: LNP™ THERMOCOMP™ Compound RX12402

Product reorder name: RX12402

LNP THERMOCOMP RX12402 is a compound based on Nylon 66 containing 60% Glass Fiber. Added feature of this grade is: Superior Flow.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, brk, Type I, 5 mm/min	241	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	2.4	%	ASTM D 638
Tensile Modulus, 5 mm/min	21840	MPa	ASTM D 638
Flexural Stress, brk, 1.3 mm/min, 50 mm span	371	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	17900	MPa	ASTM D 790
Tensile Stress, break, 5 mm/min	240	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.2	%	ISO 527
Tensile Modulus, 1 mm/min	20570	MPa	ISO 527
Flexural Stress	357	MPa	ISO 178
Flexural Modulus, 2 mm/min	18120	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	1250	J/m	ASTM D 4812
Izod Impact, notched, 23°C	153	J/m	ASTM D 256
Multiaxial Impact	4	J	ISO 6603
Instrumented Impact Total Energy, 23°C	10	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	75	kJ/m ²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	13	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	253	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	240	°C	ASTM D 648
CTE, -30°C to 30°C, flow	1.9E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	1.E-06	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	250	°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:

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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	237	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.7	-	ASTM D 792
Density	1.72	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.48	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.3 - 0.5	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.9 - 2	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.73	%	ISO 62
FLAME CHARACTERISTICS			
UL Recognized, 94HB Flame Class Rating (3)	1.5	mm	UL 94



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(6) Needs hard coat to consistently pass 60 sec Vertical Burn.

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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	80	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15 - 0.25	%
Melt Temperature	280 - 305	°C
Front - Zone 3 Temperature	295 - 305	°C
Middle - Zone 2 Temperature	280 - 295	°C
Rear - Zone 1 Temperature	265 - 275	°C
Mold Temperature	95 - 110	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm



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