

LNP* Thermocomp* Compound 2Z004

Americas: COMMERCIAL

LNP* 2Z004 is a compound based on Ethylenetetrafluoroethylene (ETFE) containing Milled Glass.

TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	290	kgf/cm ²	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	210	kgf/cm ²	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	23	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	53	%	ASTM D 638
Tensile Modulus, 50 mm/min	17400	kgf/cm ²	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	13000	kgf/cm ²	ASTM D 790
Tensile Stress, yield, 5 mm/min	27	MPa	ISO 527
Tensile Stress, break, 5 mm/min	22	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	22	%	ISO 527
Tensile Strain, break, 5 mm/min	78	%	ISO 527
Tensile Modulus, 1 mm/min	1510	MPa	ISO 527
Flexural Stress	24	MPa	ISO 178
Flexural Modulus, 2 mm/min	1210	MPa	ISO 178
IMPACT			
Izod Impact, unnotched, 23°C	136	cm-kgf/cm	ASTM D 4812
Izod Impact, notched, 23°C	62	cm-kgf/cm	ASTM D 256
Instrumented Impact Total Energy, 23°C	270	cm-kgf	ASTM D 3763
Izod Impact, unnotched 80°10*4 +23°C	119	kJ/m ²	ISO 180/1U
Izod Impact, notched 80°10*4 +23°C	37	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	88	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	52	°C	ASTM D 648
CTE, -30°C to 30°C, flow	8.E-05	1/°C	ASTM D 696



(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±176.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.

Source GMD, last updated:

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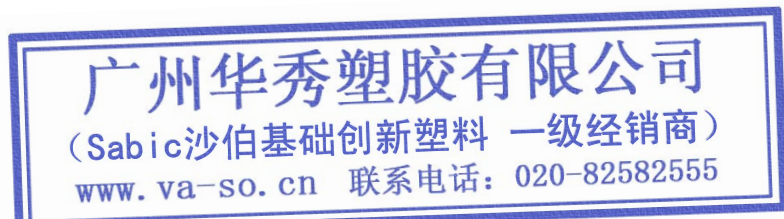
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TYPICAL PROPERTIES ¹	TYPICAL VALUE	Unit	Standard
THERMAL			
CTE, -30°C to 30°C, xflow	8.7E-05	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	89	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	50	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.84	-	ASTM D 792
Density	1.83	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0	%	ASTM D 570



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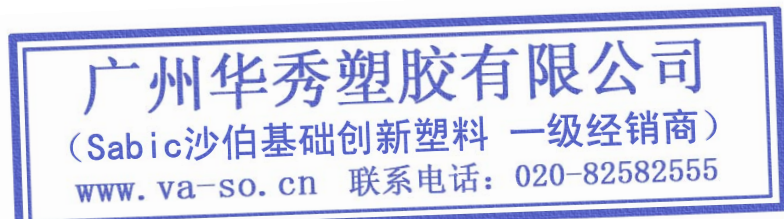
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PROCESSING PARAMETERS	TYPICAL VALUE	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Melt Temperature	315	°C
Front - Zone 3 Temperature	325 - 340	°C
Middle - Zone 2 Temperature	300 - 325	°C
Rear - Zone 1 Temperature	280 - 300	°C
Mold Temperature	90 - 120	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm



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