

# LNPT<sup>TM</sup> THERMOCOMP<sup>TM</sup> COMPOUND PCAF04FRHH

## DESCRIPTION

LNP THERMOCOMP PCAF04FRHH compound is based on Polycarbonate/Acrylonitrile Butadiene Styrene (PC/ABS) blend containing 20 % glass fiber. Added features of this grade include: Non-Brominated, Non-Chlorinated Flame Retardants.

GENERAL INFORMATION	
Features	Flame Retardant, Non Cl/Br flame retardant, High stiffness/Strength
Fillers	Glass Fiber
Polymer Types	Polycarbonate + ABS (PC+ABS)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Building and Construction	Building Component
Consumer	Sport/Leisure, Personal Accessory, Home Appliances, Commercial Appliance
Electrical and Electronics	Mobile Phone - Computer - Tablets
Industrial	Electrical

## TYPICAL PROPERTY VALUES

Revision 20230830

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>MECHANICAL <sup>(1)</sup></b>			
Tensile Stress, break, 5 mm/min	85	MPa	ISO 527
Tensile Modulus, 1 mm/min	6200	MPa	ISO 527
Flexural Stress, break, 2 mm/min	130	MPa	ISO 178
Flexural Strain, break, 2 mm/min	2.5	%	ISO 178
Flexural Modulus, 2 mm/min	5800	MPa	ISO 178
<b>IMPACT <sup>(1)</sup></b>			
Izod Impact, notched 80*10*4 +23°C	23	kJ/m <sup>2</sup>	ISO 180/1A
<b>THERMAL <sup>(1)</sup></b>			
Vicat Softening Temp, Rate B/120	130	°C	ISO 306
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	118	°C	ISO 75/Ae
Relative Temp Index, Elec <sup>(2)</sup>	80	°C	UL 746B
Relative Temp Index, Mech w/impact <sup>(2)</sup>	80	°C	UL 746B
Relative Temp Index, Mech w/o impact <sup>(2)</sup>	80	°C	UL 746B
<b>PHYSICAL <sup>(1)</sup></b>			
Mold Shrinkage, flow <sup>(3)</sup>	0.2 – 0.4	%	SABIC method
Mold Shrinkage, xflow <sup>(3)</sup>	0.3 – 0.5	%	SABIC method
Density	1.32	g/cm <sup>3</sup>	ISO 1183
Melt Volume Rate, MVR at 260°C/5.0 kg	8	cm <sup>3</sup> /10 min	ISO 1133
<b>ELECTRICAL <sup>(1)</sup></b>			
Comparative Tracking Index (UL) {PLC}	4	PLC Code	UL 746A
Comparative Tracking Index <sup>(4)</sup>	150	V	IEC 60112

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
<b>FLAME CHARACTERISTICS <sup>(2)</sup></b>			
UL Yellow Card Link	<u>E45329-101284052</u>	-	-
UL Recognized, 94V-0 Flame Class Rating	≥1.5	mm	UL 94
Glow Wire Ignitability Temperature, 2.0 mm	825	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.5 mm	825	°C	IEC 60695-2-13
Glow Wire Flammability Index, 2.0 mm	960	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.5 mm	960	°C	IEC 60695-2-12
Oxygen Index (LOI)	39	%	ISO 4589
<b>INJECTION MOLDING <sup>(5)</sup></b>			
Drying Temperature	80 – 90	°C	
Drying Time	2 – 4	Hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	230 – 270	°C	
Nozzle Temperature	220 – 260	°C	
Front - Zone 3 Temperature	230 – 270	°C	
Middle - Zone 2 Temperature	220 – 260	°C	
Rear - Zone 1 Temperature	200 – 230	°C	
Hopper Temperature	60 – 80	°C	
Mold Temperature	50 – 70	°C	

(1) The information stated on Technical Datasheets should be used as indicative only for material selection purposes and not be utilized as specification or used for part or tool design.

(2) UL Ratings shown on the technical datasheet might not cover the full range of thicknesses and colors. For details, please see the UL Yellow Card.

(3) 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.

(4) Value shown here is based on internal measurement.

(5) Injection Molding parameters are only mentioned as general guidelines. These may not apply or may need adjustment in specific situations such as low shot sizes, large part molding, thin wall molding and gas-assist molding.

## MORE INFORMATION

For curve data and CAE cards, please visit and register at <https://materialfinder.sabic-specialties.com>

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