

## LNP<sup>™</sup> THERMOCOMP<sup>™</sup> COMPOUND UX06032

UX06032

## **DESCRIPTION**

LNP THERMOCOMP UX06032 is a compound based on Polyphthalamide resin containing Glass Fiber, Flame Retardant. Added features of this material include: Flame Retardant, Non-Brominated & Non-Chlorinated Flame Retardant, Heat Stabilized.

## **TYPICAL PROPERTY VALUES**

Revision 20200914

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, break, 5 mm/min	130	MPa	ISO 527
Tensile Strain, break, 5 mm/min	2.1	%	ISO 527
Tensile Modulus, 1 mm/min	11400	MPa	ISO 527
Flexural Stress, break, 2 mm/min	200	MPa	ISO 178
Flexural Modulus, 2 mm/min	9900	MPa	ISO 178
IMPACT			
Izod Impact, unnotched 80*10*4 +23°C	40	kJ/m²	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	5	kJ/m²	ISO 180/1A
THERMAL			
CTE, 23°C to 60°C, flow	2.1E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	5.4E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	275	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	258	°C	ISO 75/Af
Relative Temp Index, Elec <sup>(1)</sup>	140	°C	UL 746B
Relative Temp Index, Mech w/impact (1)	140	°C	UL 746B
Relative Temp Index, Mech $w/o$ impact $^{(1)}$	140	°C	UL 746B
PHYSICAL			
Mold Shrinkage on Tensile Bar, flow	0.2 – 0.3	%	SABIC method
Density	1.46	g/cm³	ISO 1183
Water Absorption, (23°C/24hrs)	0.23	%	ISO 62-1
ELECTRICAL			
Comparative Tracking Index (2)	600	V	IEC 60112
Comparative Tracking Index (UL) {PLC}	0	PLC Code	UL 746A
Hot-Wire Ignition (HWI), PLC 0	≥0.41	mm	UL 746A
High Amp Arc Ignition (HAI), PLC 0	≥0.41	mm	UL 746A
FLAME CHARACTERISTICS (1)			
UL Yellow Card Link	<u>E45329-101284058</u>	-	
UL Yellow Card Link 2	E207780-103093686	-	•
UL Recognized, 94V-0 Flame Class Rating	≥0.41	mm	UL 94
Glow Wire Ignitability Temperature, 0.8 mm	825	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 1.6 mm	825	°C	IEC 60695-2-13
Glow Wire Ignitability Temperature, 3.0 mm	850	°C	IEC 60695-2-13
Glow Wire Flammability Index, 3.0 mm	960	°C	IEC 60695-2-12



PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Glow Wire Flammability Index, 0.8 mm	960	°C	IEC 60695-2-12
Glow Wire Flammability Index, 1.6 mm	960	°C	IEC 60695-2-12
INJECTION MOLDING			
Drying Temperature	120 – 140	°C	
Drying Time	4 – 6	hrs	
Melt Temperature	305 – 315	°C	
Front - Zone 3 Temperature	295 – 315	°C	
Middle - Zone 2 Temperature	290 – 310	°C	
Rear - Zone 1 Temperature	280 – 300	°C	
Mold Temperature	130 – 150	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	40 – 80	rpm	

<sup>(1)</sup> 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.

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<sup>(2)</sup> Value shown here is based on internal measurement.