

## LNP\* Verton\* Compound UX03320

Americas: COMMERCIAL

Also known as: PDX-U-03320  
Product Reorder Name: UX03320

VERTON\* UX03320 is a compound based on Polyphthalamide resin containing Long Glass.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, break	220	MPa	ASTM D 638
Tensile Strain, break	1.9	%	ASTM D 638
Tensile Modulus, 5 mm/min	18200	MPa	ASTM D 638
Flexural Stress	300	MPa	ASTM D 790
Flexural Modulus	18000	MPa	ASTM D 790
Tensile Stress, break	245	MPa	ISO 527
Tensile Stress, break	200	MPa	ISO 527
Tensile Strain, break	1.5	%	ISO 527
Tensile Strain, break	1.9	%	ISO 527
Tensile Modulus, 1 mm/min	20360	MPa	ISO 527
Tensile Modulus, 1 mm/min	20300	MPa	ISO 527
Flexural Stress	360	MPa	ISO 178
Flexural Stress, break, 2 mm/min	360	MPa	ISO 178
Flexural Modulus	17700	MPa	ISO 178
Flexural Modulus, 2 mm/min	17700	MPa	ISO 178
IMPACT	Value	Unit	Standard
Izod Impact, unnotched, 23°C	800	J/m	ASTM D 4812
Izod Impact, notched, 23°C	300	J/m	ASTM D 256
Multiaxial Impact	19	J	ISO 6603
Instrumented Impact Total Energy, 23°C	15	J	ASTM D 3763
Izod Impact, unnotched 80*10*4 +23°C	70	kJ/m <sup>2</sup>	ISO 180/1U
Izod Impact, notched 80*10*4 +23°C	38	kJ/m <sup>2</sup>	ISO 180/1A
Izod Impact, notched 80*10*4 +23°C	38	kJ/m <sup>2</sup>	ISO 180/1A
THERMAL	Value	Unit	Standard
HDT, 1.82 MPa, 3.2mm, unannealed	260	°C	ASTM D 648
CTE, -40°C to 40°C, flow	1.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	2.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	1.2E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	2.2E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	276	°C	ISO 75/Af
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	275	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
Density	1.63	g/cm <sup>3</sup>	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.2	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs	0.05 - 0.1	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.08 - 0.2	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.06	%	ISO 294

Mold Shrinkage, xflow, 24 hrs	0.15	%	ISO 294
Spiral flow (1mm)	30	cm	SABIC Method
Spiral flow (3mm)	70	cm	SABIC Method
Density	1.63	g/cm <sup>3</sup>	ISO 1183
Density	1.63	g/cm <sup>3</sup>	ISO 1183
Moisture Absorption (23°C / 50% RH)	0.3	%	ISO 62
<b>FLAME CHARACTERISTICS</b>			
	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	0.8	mm	UL 94

Source GMD, last updated:02/08/2008

## Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	120 - 150	°C
Drying Time	4	hrs
Maximum Moisture Content	0.15	%
Melt Temperature	315 - 330	°C
Front - Zone 3 Temperature	330 - 345	°C
Middle - Zone 2 Temperature	320 - 330	°C
Rear - Zone 1 Temperature	315 - 325	°C
Mold Temperature	140 - 165	°C
Back Pressure	0.2 - 0.3	MPa
Screw Speed	30 - 60	rpm

Source GMD, last updated:02/08/2008

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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