

# LNPTM VERTONTM COMPOUND UVOOAS

UF-700-10 HS

## **DESCRIPTION**

LNP VERTON UV00AS is a compound based on Polyphthalamide (PPA) resin containing 50% long glass fiber. Added features include Heat Stabilized and Structural.

GENERAL INFORMATION	
Features	Heat Stabilized, High stiffness/Strength, Weatherable/UV stable, No PFAS intentionally added
Fillers	Glass Fiber
Polymer Types	Polyphthalamide (PPA)
Processing Techniques	Injection Molding

INDUSTRY	SUB INDUSTRY
Automotive	Automotive Exteriors
Building and Construction	Building Component
Consumer	Sport/Leisure, Home Appliances, Commercial Appliance
Industrial	Electrical, Industrial General

## **TYPICAL PROPERTY VALUES**

Revision 20231109

MECHANICAL (1)           Tensile Stress, yield         257         MPa         ASTM D638           Tensile Stress, break         257         MPa         ASTM D638           Tensile Strain, yield         1.8         %         ASTM D638           Tensile Strain, break         1.8         %         ASTM D638           Tensile Modulus, 50 mm/min         19300         MPa         ASTM D638           Flexural Stress         386         MPa         ASTM D790           Flexural Modulus         17230         MPa         ASTM D790           Tensile Stress, yield         222         MPa         ISO 527           Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         Izod Impact, unnotched, 23°C         1228         J/m         ASTM D4812           Izod Impact, notched, 23°C         267         J/m         ASTM D256	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
Tensile Stress, break         257         MPa         ASTM D638           Tensile Strain, yield         1.8         %         ASTM D638           Tensile Strain, break         1.8         %         ASTM D638           Tensile Modulus, 50 mm/min         19300         MPa         ASTM D638           Flexural Stress         386         MPa         ASTM D790           Flexural Modulus         17230         MPa         ASTM D790           Tensile Stress, yield         222         MPa         ISO 527           Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         IMPACT (1)         IMPACT (1)           Izod Impact, unnotched, 23°C         1228         J/m         ASTM D4812	MECHANICAL (1)			
Tensile Strain, yield         1.8         %         ASTM D638           Tensile Strain, break         1.8         %         ASTM D638           Tensile Modulus, 50 mm/min         19300         MPa         ASTM D638           Flexural Stress         386         MPa         ASTM D790           Flexural Modulus         17230         MPa         ASTM D790           Tensile Stress, yield         222         MPa         ISO 527           Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         MPA         ISO 178           Iso 10 mpact, unnotched, 23°C         1228         J/m         ASTM D4812	Tensile Stress, yield	257	MPa	ASTM D638
Tensile Strain, break         1.8         %         ASTM D638           Tensile Modulus, 50 mm/min         19300         MPa         ASTM D638           Flexural Stress         386         MPa         ASTM D790           Flexural Modulus         17230         MPa         ASTM D790           Tensile Stress, yield         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         IMPACT (1)         IMPACT (1)         ASTM D4812	Tensile Stress, break	257	MPa	ASTM D638
Tensile Modulus, 50 mm/min         19300         MPa         ASTM D638           Flexural Stress         386         MPa         ASTM D790           Flexural Modulus         17230         MPa         ASTM D790           Tensile Stress, yield         222         MPa         ISO 527           Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         IMPACT (1)         IMPACT (1)         ASTM D4812	Tensile Strain, yield	1.8	%	ASTM D638
Flexural Stress         386         MPa         ASTM D790           Flexural Modulus         17230         MPa         ASTM D790           Tensile Stress, yield         222         MPa         ISO 527           Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         IMPACT (1)           Lood Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Tensile Strain, break	1.8	%	ASTM D638
Flexural Modulus         17230         MPa         ASTM D790           Tensile Stress, yield         222         MPa         ISO 527           Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         IMPACT (1)           Lzod Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Tensile Modulus, 50 mm/min	19300	MPa	ASTM D638
Tensile Stress, yield         222         MPa         ISO 527           Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         IMPACT (1)           Izod Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Flexural Stress	386	MPa	ASTM D790
Tensile Stress, break         222         MPa         ISO 527           Tensile Strain, yield         1.4         %         ISO 527           Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         Lzod Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Flexural Modulus	17230	MPa	ASTM D790
Tensile Strain, yield         1.4         %         ISO 527           Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         Lym ASTM D4812	Tensile Stress, yield	222	MPa	ISO 527
Tensile Strain, break         1.4         %         ISO 527           Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         Lad Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Tensile Stress, break	222	MPa	ISO 527
Tensile Modulus, 1 mm/min         19220         MPa         ISO 527           Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         Lzod Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Tensile Strain, yield	1.4	%	ISO 527
Flexural Stress         393         MPa         ISO 178           Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         Izod Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Tensile Strain, break	1.4	%	ISO 527
Flexural Modulus         17000         MPa         ISO 178           IMPACT (1)         Izod Impact, unnotched, 23°C         1228         J/m         ASTM D4812	Tensile Modulus, 1 mm/min	19220	MPa	ISO 527
IMPACT <sup>(1)</sup> Izod Impact, unnotched, 23°C 1228 J/m ASTM D4812	Flexural Stress	393	MPa	ISO 178
Izod Impact, unnotched, 23°C 1228 J/m ASTM D4812	Flexural Modulus	17000	MPa	ISO 178
	IMPACT (1)			
Izod Impact, notched, 23°C 267 J/m ASTM D256	Izod Impact, unnotched, 23°C	1228	J/m	ASTM D4812
	Izod Impact, notched, 23°C	267	J/m	ASTM D256
Instrumented Dart Impact Energy @ peak, 23°C 9 ASTM D3763	Instrumented Dart Impact Energy @ peak, 23°C	9	J	ASTM D3763
Multiaxial Impact 7 ISO 6603	Multiaxial Impact	7	J	ISO 6603
Izod Impact, unnotched 80*10*4 +23°C         78         kJ/m²         ISO 180/1U	Izod Impact, unnotched 80*10*4 +23°C	78	kJ/m²	ISO 180/1U



PRODE INTEREM         TYPICAL VALUES         UNITS         EST METHODS           Izod Inpact, notched 80°10°4 + 23°C         41         kl /m²         50 180/1A           THERMAL 1°         THERMAL 1°         THERMAL 1°         THERMAL 1°         THERMAL 1°         SIMI D648           HDT1, 1.82 MPa, 3.2mm, unannealed         26         °C         ASTM D648         ASTM D648           CTE, 40°C to 40°C, flow         1.46.05         1/°C         ASTM E831         ASTM E831           CTE, 40°C to 40°C, flow         1.06.05         1/°C         SO 11359-2         ASTM E831           CTE, 40°C to 40°C, flow         3.06.05         1/°C         SO 11359-2         THERMAL 1°           CTE, 40°C to 40°C, flow         3.06.05         1/°C         SO 11359-2         THERMAL 1°         SO 75/B1           CTE, 40°C to 40°C, flow         3.06.05         1/°C         SO 75/B1         THERMAL 1°         SO 75/B1         THERMAL 1° <th></th> <th></th> <th></th> <th></th>				
THERMAL <sup>(1)</sup> FOR CAS MPA 3.2 mm, unannealed         291         C         ASTM D648           HDT, L8 MPA 3.2 mm, unannealed         291         °C         ASTM D648           CTE, 40°C to 40°C, flow         1.446°O         1°C         ASTM D648           CTE, 40°C to 40°C, flow         1.060°O         1°C         ASTM B831           CTE, 40°C to 40°C, flow         1.060°O         1°C         10°C         180°D3           CTE, 40°C to 40°C, flow         1.060°O         1°C         10°C         180°D3           CTE, 40°C to 40°C, flow         1.060°O         1°C         10°C 180°D3           CTE, 40°C to 40°C, flow         1.060°O         1°C         10°13592           CTE, 40°C to 40°C, flow         1.060°O         10°C         10°13592           CTE, 40°C to 40°C, flow         1.060°O         10°C         10°C           DOT (1)         2.0         0°C         10°C           DOT (1)         1.000°C         10°C         10°C           DOT (1)         1.000°C         10°C         10°C           Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0         2         0         2           Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0         2         0°C         10°C	PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT. 0.45 MPa. 3.2mm, unannealed         291         CC         ASTM D648           HDT. 1.82 MPa. 3.2mm, unannealed         266         °C         ASTM D648           CTC. 40°C to 40°C, flow         1.44-05         1/°C         ASTM E831           CTC. 40°C to 40°C, flow         1.50-05         1/°C         STM E831           CTE. 40°C to 40°C, flow         1.50-05         1/°C         SO 1359-2           CTE. 40°C to 40°C, flow         3.00-05         1/°C         SO 1359-2           CTE. 40°C to 40°C, flow         3.00-05         1/°C         SO 1359-2           BDT/JBf, 0.45 MPa Flatw 80°10°4 sp-64mm         296         °C         10.75 /β/I           BDT/JBf, 0.45 MPa Flatw 80°10°4 sp-64mm         296         °C         30.75 /β/I           BDT/JBf, 0.45 MPa Flatw 80°10°4 sp-64mm         20         9.00-0         30.75 /β/I           BDT/JBf, 0.45 MPa Flatw 80°10°4 sp-64mm         20         30.00-0         30.00-0           BDT/JBf, 0.45 MPa Flatw 80°10°4 sp-64mm         20         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0         30.00-0	Izod Impact, notched 80*10*4 +23°C	41	kJ/m²	ISO 180/1A
HDT, 182 MPa, 3.zmm, unannealed         266         °C         ASTM D648           CTE, 40°C to 40°C, flow         1.44e05         1,°C         ASTM E831           CTE, 40°C to 40°C, flow         3.06e05         1,°C         ASTM E831           CTE, 40°C to 40°C, flow         1.50e05         1,°C         SO 11359-2           CTE, 40°C to 40°C, flow         3.06e05         1,°C         50 11359-2           CTE, 40°C to 40°C, flow         3.06e05         1,°C         50 11359-2           CTE, 40°C to 40°C, flow         3.06e05         1,°C         50 11359-2           CTE, 40°C to 40°C, flow         3.06e05         1,°C         50 11359-2           CTE, 40°C to 40°C, flow         3.06e05         3.07e0         50 75/8f           DEDT/BI, 1.84 Palatw 80°10°4 spe64mm         296         °C         50 75/8f           BDT/BI, 0.45 MPA Flatw 80°10°4 spe64mm         20         20         °C         50 75/8f           BOS 75/Kl         4         50 75/8f         3.06         50 75/8f         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06         3.06	THERMAL (1)			
CTE, 40°C to 40°C, flow         1,44E05         1,°C         ASTM E831           CTE, 40°C to 40°C, xflow         3,06E05         1,°C         ASTM E831           CTE, 40°C to 40°C, xflow         1,50E05         1,°C         ISO 1359-2           CTE, 40°C to 40°C, xflow         3,0E05         1,°C         ISO 13159-2           LDT JAI, 3,4S MPa Flatw 80°10°4 sp=64mm         296         °C         ISO 75/BI           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         296         °C         150 75/BI           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         296         °C         150 75/BI           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         296         °C         150 75/BI           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         20         2         °C         150 75/BI           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         2         2         C         STM D792           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         2         2         ASTM D792         ASTM D792           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         2         2         ASTM D792         ASTM D792           BDT/JAI, 1,8 MPa Flatw 80°10°4 sp=64mm         2         2         2         3         2         3	HDT, 0.45 MPa, 3.2 mm, unannealed	291	°C	ASTM D648
CFE, 40°C to 40°C, rdfow         3.66E0S         1,°C         ASTMEBIA           CTE, 40°C to 40°C, flow         1.50E0S         1,°C         1501359-2           CTE, 40°C to 40°C, rdfow         3.0E0S         1,°C         1501359-2           HDT/Bf, 0.45 MPa Flatw 80°10°4 sp=64mm         296         °C         150.75 /BI           HDT/Bf, 1.8 MPa Flatw 80°10°4 sp=64mm         272         °C         150.75 /BI           HDT/Bf, 1.8 MPa Flatw 80°10°4 sp=64mm         296         °C         150.75 /BI           HDT/Bf, 1.8 MPa Flatw 80°10°4 sp=64mm         296         °C         150.75 /BI           HDT/Bf, 1.8 MPa Flatw 80°10°4 sp=64mm         296         °C         150.75 /BI           HDT/Bf, 1.8 MPa Flatw 80°10°4 sp=64mm         296         °C         150.75 /BI           BOSTAND 40°1         30.20         20.00	HDT, 1.82 MPa, 3.2mm, unannealed	266	°C	ASTM D648
CTE, 40°C to 40°C, flow         1.50E05         1,°C         50 1359-2           CTE, 40°C to 40°C, xflow         3.10E05         1,°C         50 1359-2           HDT/Bf, 0.45 MPa Flatw 80°10°4 sp=64mm         296         °C         50.75 /BI           HDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm         272         °C         50.75 /AI           PHYSICAL.**         V         V         XSTM D972           Bonsty         50 Cm         20 Cm         XSTM D972           Moisture Absorption, (23°C/50% RH/24 hrs)         0.2         %         ASTM D975           Moid Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2         %         ASTM D955           Moid Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2         %         ASTM D955           Moid Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2         %         ASTM D955           Moid Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2         %         M         S0 294           Density         1.66         y         M         S0 294           Division Moid Inflage, flow, 24 hrs <sup>(2)</sup> 1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2	CTE, -40°C to 40°C, flow	1.44E-05	1/°C	ASTM E831
CFE. 40°C to 40°C, xflow         3.0E.05         1/°C         ISO 1359-2           HDT/βf, 0.45 MPa Flatw 80°10°4 sp=64mm         296         °C         150 75 /βf           HDT/βf, 1.8 MPa Flatw 80°10°4 sp=64mm         272         °C         150 75 /βf           PHYSICAL**           PHYSICAL**           Density         1.67         2.0         2.0         ASTM D792           Moisture Absorption (23°C/50% RH/24 hrs)         0.2         \$         ATM D955           Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2         \$         ATM D955           Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> 0.2         \$         ATM D955           Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> 0.2         \$         ATM D955           Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> 0.2         \$         \$         20-94           Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> 0.2         \$         \$         20-94         \$           Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> 0.2         0.2         \$         \$         20-94         \$           Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> 0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2         0.2	CTE, -40°C to 40°C, xflow	3.06E-05	1/°C	ASTM E831
HDT/Bf, 0.45 MPa Flatw 80°10°4 sp=64mm296°C10.75 /BlHDT/Af, 1.8 MPa Flatw 80°10°4 sp=64mm272°C10.75 /BlPHYSICAL.**Density1.679/cm³ASTM D792Moisture Absorption, (23°C/50% RH/24 hrs)0.2%ASTM D595Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2%ASTM D955Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2%ASTM D955Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2%ASTM D955Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 0.2%S0 294Density0.4%S0 294Distriction MolDinka2S0 183Drying Temperature120 – 150°C**Makimum Moisture Content15%**Makimum Moisture Content315 – 330°C**Melt Temperature315 – 330°C**Moidle-zone 3 Temperature30 – 345°C**Middle-zone 2 Temperature315 – 325°C**Mold Temperature40 – 165°C**Mold Temperature40 – 165°C**	CTE, -40°C to 40°C, flow	1.50E-05	1/°C	ISO 11359-2
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm 272 272 8°C 10.75 /Af 1.8 MPa Flatw 80*10*4 sp=64mm 272 372 372 372 372 372 372 372 372 372	CTE, -40°C to 40°C, xflow	3.10E-05	1/°C	ISO 11359-2
PHYSICAL <sup>(1)</sup> Pensity 1.67  Moisture Absorption, (23°C/50% RH/24 hrs) 2.0  Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> 2.0  Mold Shri	HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	296	°C	ISO 75/Bf
Density1.67g/cm³ASTM D792Moisture Absorption, (23°C/50% RH/24 hrs)0.2\$ASTM D570Mold Shrinkage, flow, 24 hrs (2)0.2\$ASTM D955Mold Shrinkage, xflow, 24 hrs (2)0.5\$ASTM D955Mold Shrinkage, flow, 24 hrs (2)0.2\$SO 294Mold Shrinkage, xflow, 24 hrs (2)0.48\$SO 294Mold Shrinkage, xflow, 24 hrs (2)0.48\$SO 294DensityJordan½SO 1183INJECTION MOLDING (3)Drying Temperature120 − 150CYMaximum Moisture Content0.15%YMelt Temperature315 − 330CYYFront - Zone 3 Temperature320 − 330CYMiddle - Zone 2 Temperature315 − 325CYYMold Temperature315 − 325CYMold Temperature310 − 325CYMold Temperature310 − 325CYMold Temperature310 − 325MPaY	HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	272	°C	ISO 75/Af
Moisture Absorption, (23°C/50% RH/24 hrs)0.2%ASTM D570Mold Shrinkage, flow, 24 hrs (2)0.2%ASTM D955Mold Shrinkage, xflow, 24 hrs (2)0.5%ASTM D955Mold Shrinkage, flow, 24 hrs (2)0.2%ISO 294Mold Shrinkage, xflow, 24 hrs (2)0.48%ISO 294DensityJoe%SO 1183INJECTION MOLDING (3)Drying Temperature120 − 150°CDrying Time4HrsMaximum Moisture Content0.15%Melt Temperature315 − 330°CFront - Zone 3 Temperature320 − 330°CMiddle - Zone 2 Temperature320 − 330°CRear - Zone 1 Temperature315 − 325°CMold Temperature140 − 165°CMold Temperature140 − 165°C <td>PHYSICAL (1)</td> <td></td> <td></td> <td></td>	PHYSICAL (1)			
Mold Shrinkage, flow, 24 hrs (2)0.2%ASTM D955Mold Shrinkage, xflow, 24 hrs (2)0.2%ASTM D955Mold Shrinkage, xflow, 24 hrs (2)0.2%%SO 294Mold Shrinkage, xflow, 24 hrs (2)0.48%\$100 294Desity1.66yy\$\$INJECTION MOLDING (3)Drying Temperature120 – 150°C*Drying Time4Hrs*Maximum Moisture Content0.15%*Melt Temperature315 – 330°C*Front - Zone 3 Temperature330 – 345°C*Middle - Zone 2 Temperature320 – 330°C*Rear - Zone 1 Temperature315 – 325°C*Mold Temperature140 – 165°C*Mold Temperature0.2 – 0.3MPa	Density	1.67	g/cm³	ASTM D792
Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> Mold Shrinkage, xflow, 24 hrs	Moisture Absorption, (23°C/50% RH/24 hrs)	0.2	%	ASTM D570
Mold Shrinkage, flow, 24 hrs <sup>(2)</sup> Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup> Density  1.66  Note The Composition of the Composition o	Mold Shrinkage, flow, 24 hrs <sup>(2)</sup>	0.2	%	ASTM D955
Mold Shrinkage, xflow, 24 hrs (2)0.48%150 294Density1.66ycm3150 1183INJECTION MOLDING (3)Drying Temperature120 - 150°CDrying Time4HrsMaximum Moisture Content0.15%Melt Temperature315 - 330°CFront - Zone 3 Temperature330 - 345°CMiddle - Zone 2 Temperature320 - 330°CMear - Zone 1 Temperature315 - 325°CMold Temperature140 - 165°CBack PressureMPa*	Mold Shrinkage, xflow, 24 hrs (2)	0.5	%	ASTM D955
DensityJ.66g/cm³ISO 1183INJECTION MOLDING (3)Drying Temperature120 – 150°CDrying TimeHrsHrsMaximum Moisture Content0.15%Melt Temperature315 – 330°CFront - Zone 3 Temperature330 – 345°CMiddle - Zone 2 Temperature320 – 330°CRear - Zone 1 Temperature315 – 325°CMold Temperature140 – 165°CBack Pressure0.2 – 0.3MPa	Mold Shrinkage, flow, 24 hrs (2)	0.2	%	ISO 294
INJECTION MOLDING (3)  Drying Temperature 120 – 150 °C  Drying Time 44 Hrs  Maximum Moisture Content 515 30 °C  Melt Temperature 315 – 330 °C  Front - Zone 3 Temperature 320 – 330 °C  Middle - Zone 2 Temperature 320 – 330 °C  Rear - Zone 1 Temperature 315 – 325 °C  Mold Temperature 140 – 165 °C  Mold Temperature 140 – 165 °C  Mold Temperature 140 – 165 °C  Mold Temperature 150 – 300 °C  Mold Temperature 160 – 300 °C  Mold Temperature 170 – 300 °C  Mold Temperature 170 °C  Mold Temperature 17	Mold Shrinkage, xflow, 24 hrs <sup>(2)</sup>	0.48	%	ISO 294
Drying Temperature120 – 150°CDrying Time4HrsMaximum Moisture Content0.15%Melt Temperature315 – 330°CFront - Zone 3 Temperature330 – 345°CMiddle - Zone 2 Temperature320 – 330°CRear - Zone 1 Temperature315 – 325°CMold Temperature140 – 165°CBack Pressure0.2 – 0.3MPa	Density	1.66	g/cm³	ISO 1183
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         MPa	INJECTION MOLDING (3)			
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	Drying Temperature	120 – 150	°C	
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	Drying Time	4	Hrs	
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	Maximum Moisture Content	0.15	%	
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	Melt Temperature	315 – 330	°C	
Rear - Zone 1 Temperature         315 – 325         °C           Mold Temperature         140 – 165         °C           Back Pressure         0.2 – 0.3         MPa	Front - Zone 3 Temperature	330 – 345	°C	
Mold Temperature         140 – 165         °C           Back Pressure         0.2 – 0.3         MPa	Middle - Zone 2 Temperature	320 – 330	°C	
Back Pressure 0.2 – 0.3 MPa	Rear - Zone 1 Temperature	315 – 325	°C	
	Mold Temperature	140 – 165	°C	
Screw Speed         30 – 60         rpm	Back Pressure	0.2 – 0.3	MPa	
	Screw Speed	30 – 60	rpm	

<sup>(1)</sup> 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.

### **ADDITIONAL PRODUCT NOTES**

No PFAS intentionally added: The grade listed in this document does not contain PFAS intentionally added during Seller's manufacturing process and is not expected to contain unintentional PFAS impurities. Each user is responsible for evaluating the presence of unintentional PFAS impurities.

#### **DISCLAIMER**

Any sale by SABIC, its subsidiaries and affiliates (each a "seller"), is made exclusively under seller's standard conditions of sale (available upon request) unless agreed otherwise in writing and signed on behalf of the seller. While the information contained herein is given in good faith, SELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING MERCHANTABILITY AND NONINFRINGEMENT OF INTELLECTUAL PROPERTY, NOR ASSUMES ANY LIABILITY, DIRECT OR INDIRECT, WITH RESPECT TO THE PERFORMANCE, SUITABILITY OR FITNESS FOR INTENDED USE OR PURPOSE OF THESE PRODUCTS IN ANY APPLICATION. Each customer must determine the suitability of seller materials for the customer's particular use through appropriate testing and analysis. No statement by seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right.

<sup>(2)</sup> 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., 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.

<sup>(3)</sup> 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.