

LNP™ COLORCOMP™ COMPOUND D10006U

D10006U
REGION AMERICAS

DESCRIPTION

LNP COLORCOMP D10006U is an unfilled Polycarbonate. Added features include: Lasermarking Capability, UL Listed.

TYPICAL PROPERTY VALUES

Revision 20170816

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
MECHANICAL			
Tensile Stress, yld, Type I, 5 mm/min	61	MPa	ASTM D 638
Tensile Stress, brk, Type I, 5 mm/min	54	MPa	ASTM D 638
Tensile Strain, yld, Type I, 5 mm/min	6	%	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	79	%	ASTM D 638
Tensile Modulus, 5 mm/min	2470	MPa	ASTM D 638
Flexural Modulus, 1.3 mm/min, 50 mm span	2440	MPa	ASTM D 790
Tensile Stress, yield, 5 mm/min	60	MPa	ISO 527
Tensile Stress, break, 5 mm/min	55	MPa	ISO 527
Tensile Strain, yield, 5 mm/min	6	%	ISO 527
Tensile Strain, break, 5 mm/min	151	%	ISO 527
Tensile Modulus, 1 mm/min	2460	MPa	ISO 527
Flexural Stress	89	MPa	ISO 178
Flexural Modulus, 2 mm/min	2320	MPa	ISO 178
IMPACT			
Izod Impact, notched, 23°C	741	J/m	ASTM D 256
Multiaxial Impact	76	J	ISO 6603
Instrumented Impact Total Energy, 23°C	63	J	ASTM D 3763
Izod Impact, notched 80*10*4 +23°C	58	kJ/m ²	ISO 180/1A
THERMAL			
HDT, 0.45 MPa, 3.2 mm, unannealed	138	°C	ASTM D 648
HDT, 1.82 MPa, 3.2mm, unannealed	125	°C	ASTM D 648
CTE, -30°C to 30°C, flow	7.1E-05	1/°C	ASTM D 696
CTE, -30°C to 30°C, xflow	6.93E-03	1/°C	ASTM D 696
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	136	°C	ISO 75/Bf

PROPERTIES	TYPICAL VALUES	UNITS	TEST METHODS
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	124	°C	ISO 75/Af
PHYSICAL			
Specific Gravity	1.24	-	ASTM D 792
Density	1.24	g/cm ³	ASTM D 792
Moisture Absorption, 50% RH, 24 hrs	0.13	%	ASTM D 570
Mold Shrinkage, flow, 24 hrs (5)	0.6 – 0.8	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs (5)	0.8 – 1	%	ASTM D 955
Moisture Absorption (23°C / 50% RH)	0.24	%	ISO 62
FLAME CHARACTERISTICS			
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
INJECTION MOLDING			
Drying Temperature	120	°C	
Drying Time	4	hrs	
Maximum Moisture Content	0.02	%	
Melt Temperature	305 – 325	°C	
Front - Zone 3 Temperature	320 – 330	°C	
Middle - Zone 2 Temperature	310 – 320	°C	
Rear - Zone 1 Temperature	295 – 305	°C	
Mold Temperature	80 – 110	°C	
Back Pressure	0.2 – 0.3	MPa	
Screw Speed	30 – 60	rpm	

DISCLAIMER

The information contained herein may include typical properties of our products or their typical performances when used in certain typical applications. Actual properties of our products, in particular when used in conjunction with any third party material(s) or for any non-typical applications, may differ from typical properties.

It is the customer's responsibility to inspect and test our product(s) in order to satisfy itself as to the suitability of the product(s) for its and its customers particular purposes. The customer is responsible for the appropriate, safe and legal use, processing and handling of all product(s) purchased from us.

Nothing herein is intended to be nor shall it constitute a warranty whatsoever, in particular, warranty of merchantability or fitness for a particular purpose.

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