SABIC Innovative Plastics™



LNP* Lubriloy* Compound D20009P Asia Pacific: COMMERCIAL

Also known as: D- EP FR

Product Reorder Name: D20009P

LNP* Lubriloy* D20009P is a compound based on Polycarbonate resin containing Flame Retardant, Proprietary Lubricant. Added features of this material include: Internally Lubricated, Flame Retardant, Easy Molding.

Property

TYPICAL PROPERTIES (1)					
MECHANICAL	Value	Unit	Standard		
Tensile Stress, yield	57	MPa	ASTM D 638		
Tensile Stress, break	51	MPa	ASTM D 638		
Tensile Strain, yield	6.2	%	ASTM D 638		
Tensile Strain, break	77.4	%	ASTM D 638		
Tensile Modulus, 50 mm/min	2060	MPa	ASTM D 638		
Flexural Modulus	2060	MPa	ASTM D 790		
Tensile Stress, yield	58	MPa	ISO 527		
Tensile Stress, break	49	MPa	ISO 527		
Tensile Strain, yield	5.8	%	ISO 527		
Tensile Strain, break	67.9	%	ISO 527		
Tensile Modulus, 1 mm/min	2170	MPa	ISO 527		
Flexural Stress	73	MPa	ISO 178		
Flexural Modulus	2100	MPa	ISO 178		
IMPACT	Value	Unit	Standard		
Izod Impact, unnotched, 23°C	1975	J/m	ASTM D 4812		
Izod Impact, notched, 23°C	176	J/m	ASTM D 256		
Instrumented Impact Energy @ peak, 23°C	47	J	ASTM D 3763		
Multiaxial Impact	48	J	ISO 6603		
Izod Impact, unnotched 80*10*4 +23°C	172	kJ/m²	ISO 180/1U		
Izod Impact, notched 80*10*4 +23°C	16	kJ/m²	ISO 180/1A		
THERMAL	Value	Unit	Standard		
HDT, 0.45 MPa, 3.2 mm, unannealed	137	°C	ASTM D 648		

HDT, 1.82 MPa, 3.2mm, unannealed	126	°C	ASTM D 648
CTE, -40°C to 40°C, flow	7.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ASTM E 831
CTE, -40°C to 40°C, flow	7.3E-05	1/°C	ISO 11359-2
CTE, -40°C to 40°C, xflow	7.2E-05	1/°C	ISO 11359-2
HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm	139	°C	ISO 75/Bf
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	127	°C	ISO 75/Af
PHYSICAL	Value	Unit	Standard
PHYSICAL Density	Value 1.21	Unit g/cm³	Standard ASTM D 792
Density	1.21	g/cm³ %	ASTM D 792
Density Moisture Absorption, 50% RH, 24 hrs	1.21 0.1	g/cm³ %	ASTM D 792 ASTM D 570
Density Moisture Absorption, 50% RH, 24 hrs Wear Factor Washer	1.21 0.1 50	g/cm³ %	ASTM D 792 ASTM D 570 ASTM D 3702 Modified
Density Moisture Absorption, 50% RH, 24 hrs Wear Factor Washer Dynamic COF	1.21 0.1 50 0.29	g/cm³ %	ASTM D 792 ASTM D 570 ASTM D 3702 Modified ASTM D 3702 Modified

Source GMD, last updated:09/24/2008

Processing

Parameter					
Injection Molding	Value	Unit			
Drying Temperature	120	°C			
Drying Time	4	hrs			
Maximum Moisture Content	0.02	%			
Melt Temperature	305 - 315	°C			
Front - Zone 3 Temperature	305 - 315	°C			
Middle - Zone 2 Temperature	300 - 310	°C			
Rear - Zone 1 Temperature	295 - 305	°C			
Mold Temperature	65 - 95	°C			
Back Pressure	0.2 - 0.3	MPa			
Screw Speed	30 - 60	rpm			

Source GMD, last updated:09/24/2008

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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