

LNP™ LUBRILOY™ D20001
compound

Polycarbonate
SABIC Innovative Plastics

Technical Data		
Product Description		
LNP LUBRILOY* D20001 is a compound based on Polycarbonate resin containing Flame Retardant, Proprietary Lubricant. Added features of this material include: Flame Retardant.		
Also known as: LNP* LUBRILOY* Compound D-FR ECO Product reorder name: D20001		
General		
Material Status	• Commercial: Active	
Literature ¹	• Technical Datasheet	
UL Yellow Card ²	• E121562-101283819	
Search for UL Yellow Card	• SABIC Innovative Plastics • LNP™ LUBRILOY™	
Availability	• North America	
Additive	• Flame Retardant	• Lubricant
Features	• Flame Retardant	• Lubricated
Processing Method	• Injection Molding	• Injection Molding
Physical		
	Nominal Value Unit	Test Method
Density	1.20 g/cm³	ISO 1183 ASTM D792
Molding Shrinkage		
Flow : 24 hr	0.50 %	ASTM D955
Across Flow : 24 hr	0.60 %	ASTM D955
Across Flow : 24 hr	0.57 %	ISO 294-4
Flow : 24 hr	0.53 %	ISO 294-4
Water Absorption (Equilibrium, 23°C, 50% RH)	0.12 %	ISO 62
Mechanical		
	Nominal Value Unit	Test Method
Tensile Modulus		
-- ⁴	2550 MPa	ASTM D638
--	2600 MPa	ISO 527-2/1
Tensile Strength		
Yield	67.3 MPa	ASTM D638
Yield	62.3 MPa	ISO 527-2
Break	60.2 MPa	ASTM D638
Break	54.5 MPa	ISO 527-2
Tensile Elongation		
Yield	4.5 %	ASTM D638
Yield	4.3 %	ISO 527-2
Break	6.5 %	ASTM D638
Break	6.7 %	ISO 527-2
Flexural Modulus		
--	2830 MPa	ASTM D790
--	2800 MPa	ISO 178
Flexural Strength		
--	103 MPa	ASTM D790
--	102 MPa	ISO 178
Coefficient of Friction vs. Itself - Dynamic vs. Itself - Static	0.29 0.16	ASTM D3702 Modified
Wear Factor - Washer	10.0 ^{10^-10} in^5-min/ft-lb-hr	ASTM D3702 Modified

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Impact	Nominal Value Unit	Test Method
Notched Izod Impact		
23°C	64 J/m	ASTM D256
23°C ⁵	6.9 kJ/m²	ISO 180/1A
Unnotched Izod Impact		
23°C	1600 J/m	ASTM D4812
23°C ⁵	100 kJ/m²	ISO 180/1U
Instrumented Dart Impact		ASTM D3763
23°C, Energy at Peak Load	51.0 J	
Thermal	Nominal Value Unit	Test Method
Deflection Temperature Under Load		
0.45 MPa, Unannealed, 3.20 mm	97.2 °C	ASTM D648
1.8 MPa, Unannealed, 3.20 mm	89.4 °C	ASTM D648
1.8 MPa, Unannealed, 64.0 mm Span ⁶	94.0 °C	ISO 75-2/Af
CLTE		ASTM E831
Flow : -40 to 40°C	0.000066 cm/cm/°C	ISO 11359-2
Transverse : -40 to 40°C	0.000067 cm/cm/°C	
Flammability	Nominal Value Unit	Test Method
Flame Rating (1.50 mm, Testing by SABIC)	V-0	UL 94
Injection	Nominal Value Unit	
Drying Temperature	82.2 °C	
Drying Time	4.0 to 6.0 hr	
Suggested Max Moisture	0.020 %	
Rear Temperature	249 to 260 °C	
Middle Temperature	254 to 266 °C	
Front Temperature	260 to 271 °C	
Processing (Melt) Temp	254 to 288 °C	
Mold Temperature	37.8 to 65.6 °C	
Back Pressure	0.172 to 0.344 MPa	
Screw Speed	30 to 60 rpm	