SABIC Innovative Plastics™



## LNP\* Lubriloy\* Compound DF2041 Americas: COMMERCIAL

Also known as: DF-20 FR ECO Product Reorder Name: DF2041

LNP LUBRILOY\* DF2041 is a compound based on Polycarbonate resin containing Flame Retardant, Glass Fiber, Proprietary Lubricant. Added features of this material include: Flame Retardant.

## **Property**

TYPICAL PROPERTIES (1)						
MECHANICAL	Value	Unit	Standard			
Tensile Stress, break	101	MPa	ASTM D 638			
Tensile Strain, break	2.2	%	ASTM D 638			
Tensile Modulus, 50 mm/min	6680	MPa	ASTM D 638			
Flexural Stress	153	MPa	ASTM D 790			
Flexural Modulus	6370	MPa	ASTM D 790			
Tensile Stress, break	100	MPa	ISO 527			
Tensile Strain, break	2	%	ISO 527			
Tensile Modulus, 1 mm/min	6830	MPa	ISO 527			
Flexural Stress	149	MPa	ISO 178			
Flexural Modulus	6270	MPa	ISO 178			
IMPACT	Value	Unit	Standard			
Izod Impact, unnotched, 23°C	603	J/m	ASTM D 4812			
Izod Impact, notched, 23°C	154	J/m	ASTM D 256			
Instrumented Impact Energy @ peak, 23°C	11	J	ASTM D 3763			
Multiaxial Impact	3	J	ISO 6603			
Izod Impact, unnotched 80*10*4 +23°C	36	kJ/m²	ISO 180/1U			
Izod Impact, notched 80*10*4 +23°C	9	kJ/m²	ISO 180/1A			
THERMAL	Value	Unit	Standard			
HDT, 1.82 MPa, 3.2mm, unannealed	92	°C	ASTM D 648			
HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm	102	°C	ISO 75/Af			
PHYSICAL	Value	Unit	Standard			
Density	1.33	g/cm³	ASTM D 792			
Moisture Absorption, 50% RH, 24 hrs	0.06	%	ASTM D 570			

Mold Shrinkage, flow, 24 hrs	0.2	%	ASTM D 955
Mold Shrinkage, xflow, 24 hrs	0.4	%	ASTM D 955
Mold Shrinkage, flow, 24 hrs	0.18	%	ISO 294
Mold Shrinkage, xflow, 24 hrs	0.39	%	ISO 294
Wear Factor Washer	57	10^-10 in^5-min/ft-lb-hr	ASTM D 3702 Modified
Dynamic COF	0.43	-	ASTM D 3702 Modified
Static COF	0.36	-	ASTM D 3702 Modified
Moisture Absorption (23°C / 50% RH)	0.11	%	ISO 62

Source GMD, last updated:09/30/2004

## **Processing**

Parameter					
Injection Molding	Value	Unit			
Drying Temperature	80	°C			
Drying Time	4 - 6	hrs			
Maximum Moisture Content	0.02	%			
Melt Temperature	255 - 290	°C			
Front - Zone 3 Temperature	260 - 270	°C			
Middle - Zone 2 Temperature	255 - 265	°C			
Rear - Zone 1 Temperature	250 - 260	°C			
Mold Temperature	40 - 65	°C			
Back Pressure	0.2 - 0.3	MPa			
Screw Speed	30 - 60	rpm			

Source GMD, last updated:09/30/2004

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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