

**LNP™ LUBRILOY™ Compound Z20001**

(PPE+PS)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

LNP LUBRILOY Z20001 compound is based on Polyphenylene Ether / Polystyrene (PPE/PS) blend containing proprietary lubricant. Added features of this grade include: Wear Resistant, Non-Brominated, Non-Chlorinated Flame Retardant.

UL Yellow Card Link [E121562-101345288](https://www.ul.com/yellowcard/E121562-101345288)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ASTM Data</b>			
Mold Shrinkage, MD	0.9	mm/mm	ASTM D 955
Mold Shrinkage, TD	2	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Tensile Modulus	2000	MPa	ISO 527
Yield stress	58	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	49	MPa	ISO 527
Strain at break	24	%	ISO 527
Flexural modulus	1920	MPa	ISO 178
Flexural strength	74	MPa	ISO 178
Izod impact strength, +23°C, 4mm	210	kJ/m <sup>2</sup>	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	31	kJ/m <sup>2</sup>	ISO 180/1A

<b>ASTM Data</b>			
Tensile Modulus	2120	MPa	ASTM D 638
Tensile Strength at Yield	57	MPa	ASTM D 638
Tensile Strength at Break	48	MPa	ASTM D 638
Elongation at Yield	5	%	ASTM D 638
Elongation at Break	40	%	ASTM D 638
Flexural Modulus	2130	MPa	ASTM D 790
Izod Impact notched, 1/8 in	419	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	2110	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
Temp. of deflection under load, 1.80 MPa	99	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	116	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-0	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
<b>ASTM Data</b>			
Coefficient of Thermal Expansion, MD	86.9	E-6/K	ASTM D 696
Coefficient of Thermal Expansion, TD	97.9	E-6/K	ASTM D 696
DTUL @ 66 psi	120	°C	ASTM D 648
DTUL @ 264 psi	105	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	0.22	%	Sim. to ISO 62
Water Absorption, 24hr	0.12	%	ASTM D 570
Density	1100	kg/m <sup>3</sup>	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	80	°C	-
Pre-drying - Time	4	h	-
Melt temperature	275 - 295	°C	-
Mold temperature	60 - 95	°C	-
Zone 1	255 - 265	°C	-
Zone 2	260 - 270	°C	-
Zone 3	265 - 275	°C	-
Screw speed	30 - 60	rpm	-
Back pressure	0.2 - 0.3	MPa	-

**Characteristics**

**Processing**

Injection Molding

**Special Characteristics**

Flame retardant

**Additives**

Flame retarding agent

**Regional Availability**

North America, Europe, Asia Pacific