LNP™ LUBRICOMP™ Compound RCP36 - Americas

(PA66+PTFE)-CF30 — Saudi Basic Industries Corporation (SABIC)

Product Texts

LNP LUBRICOMP RCP36 compound is based on Nylon 6/6 resin containing 30% carbon fiber, 15% PTFE/silicone. Added features of this grade include: Electrically Conductive, Wear Resistant.

UL Yellow Card Link E121562-101281618

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	**0.1**	%	ISO 294-4, 2577
Molding shrinkage, normal	**0.4**	%	ISO 294-4, 2577
ASTM Data			
Mold Shrinkage, MD	**0.2**	mm/mm	ASTM D 955
Mold Shrinkage, TD	**0.4**	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**23100**	MPa	ISO 527
Stress at break	**228**	MPa	ISO 527
Strain at break	**2**	%	ISO 527
Flexural modulus	**21300**	MPa	ISO 178
Flexural strength	**354**	MPa	ISO 178
Izod impact strength, +23°C, 4mm	**65**	kJ/m²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	**10**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**29500**	MPa	ASTM D 638
Tensile Strength at Break	**201**	MPa	ASTM D 638
Elongation at Break	**1.4**	%	ASTM D 638
Flexural Modulus	**16400**	MPa	ASTM D 790
Flexural Strength	**333**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**96**	J/m	ASTM D 256
Izod Impact unnotched, 1/8 in	**945**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**240**	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	**HB**	class	IEC 60695-11-10
Thickness tested	**1.5**	mm	-
ASTM Data			
DTUL @ 66 psi	**254**	°C	ASTM D 648
DTUL @ 264 psi	**244**	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Humidity absorption	**1.35**	%	Sim. to ISO 62
Density	**1340**	kg/m³	ISO 1183
Water Absorption, 24hr	**0.93**	%	ASTM D 570
Density	**1340**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**80**	°C	-
Pre-drying - Time	**4**	h	-
Processing humidity	**≤0.25**	%	-
Melt temperature	**275 - 290**	°C	-
Mold temperature	**80 - 95**	°C	-
Zone 1	**265 - 275**	°C	-
Zone 2	**280 - 295**	°C	-
Zone 3	**295 - 305**	°C	-
Screw speed	**30 - 60**	rpm	-
Back pressure	**0.2 - 0.3**	MPa	-

Characteristics

Processing
Injection Molding

Special Characteristics
Increased electrical conductivity

Regional Availability
North America