SABIC Innovative Plastics™

LNP* Lubricomp* Compound RN001S

Europe-Africa-Middle East: DEVELOPMENTAL

Also known as: RL4210S1
Product Reorder Name: RN001S

Lubricated Polyamide 66 injection moulding resin.

Property

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield, 50 mm/min	92	MPa	ISO 527
Tensile Strain, yield, 50 mm/min	3.5	%	ISO 527
Tensile Strain, break, 50 mm/min	30	%	ISO 527
Tensile Modulus, 1 mm/min	3200	MPa	ISO 527
Flexural Stress, yield, 2 mm/min	120	MPa	ISO 178
Flexural Modulus, 2 mm/min	3300	MPa	ISO 178
Hardness, Rockwell R	119	-	ISO 2039-2
IMPACT	Value	Unit	Standard
Izod Impact, notched 80*10*4 +23°C	4	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -20°C	3	kJ/m²	ISO 180/1A
Izod Impact, notched 80*10*4 -40°C	2	kJ/m²	ISO 180/1A
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	>50	kJ/m²	ISO 179/1eU
THERMAL	Value	Unit	Standard
CTE, 23°C to 60°C, flow	7.8E-05	1/°C	ISO 11359-2
CTE, 23°C to 60°C, xflow	7.8E-05	1/°C	ISO 11359-2
Vicat Softening Temp, Rate B/120	252	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	230	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	90	°C	ISO 75/Ae
PHYSICAL	Value	Unit	Standard
Mold Shrinkage on Tensile Bar, flow (2)	1.6 - 2	%	SABIC Method
Density	1.15	g/cm³	ISO 1183
Water Absorption, (23°C/sat)	8.5	%	ISO 62
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Compliant, 94HB Flame Class Rating (3)(4)	1.6	mm	UL 94 by GE
Oxygen Index (LOI)	26	%	ISO 4589

Source GMD, last updated:02/11/2003

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	75 - 85	°C
Drying Time	4 - 6	hrs
Maximum Moisture Content	0.2	%
Melt Temperature	260 - 280	°C
Nozzle Temperature	250 - 270	°C
Front - Zone 3 Temperature	260 - 280	°C

Middle - Zone 2 Temperature	260 - 280	°C
Rear - Zone 1 Temperature	260 - 280	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	70 - 90	°C

Source GMD, last updated:02/11/2003

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.