

Noryl* Resin CTI2550

Europe-Africa-Middle East: COMMERCIAL

NORYL CTI2550 is a glass/mineral filled material with a Vicat B/120 of 160 °C according ISO 306.

Property

TYPICAL PROPERTIES ⁽¹⁾			
	Value	Unit	Standard
MECHANICAL			
Taber Abrasion, CS-17, 1 kg	60	mg/1000cy	SABIC Method
Tensile Stress, break, 5 mm/min	75	MPa	ISO 527
Tensile Strain, break, 5 mm/min	1.2	%	ISO 527
Tensile Modulus, 1 mm/min	8000	MPa	ISO 527
Flexural Stress, break, 2 mm/min	105	MPa	ISO 178
Flexural Modulus, 2 mm/min	7000	MPa	ISO 178
Hardness, H358/30	115	MPa	ISO 2039-1
IMPACT			
	Value	Unit	Standard
Charpy Impact, unnotched, -30°C	14	kJ/m ²	ISO 179/2C
Izod Impact, unnotched 80*10*4 +23°C	13	kJ/m ²	ISO 180/1U
Izod Impact, unnotched 80*10*4 -30°C	13	kJ/m ²	ISO 180/1U
Charpy 23°C, Unnotch Edgew 80*10*4 sp=62mm	15	kJ/m ²	ISO 179/1eU
Charpy -30°C, Unnotch Edgew 80*10*4 sp=62mm	15	kJ/m ²	ISO 179/1eU
THERMAL			
	Value	Unit	Standard
Thermal Conductivity	0.26	W/m-°C	ISO 8302
CTE, 23°C to 80°C, flow	2.5E-05	1/°C	ISO 11359-2
CTE, 23°C to 80°C, xflow	4.5E-05	1/°C	ISO 11359-2
Ball Pressure Test, 125°C +/- 2°C	PASSES	-	IEC 60695-10-2
Ball Pressure Test, approximate maximum	145	°C	IEC 60695-10-2
Vicat Softening Temp, Rate A/50	165	°C	ISO 306
Vicat Softening Temp, Rate B/50	155	°C	ISO 306
Vicat Softening Temp, Rate B/120	160	°C	ISO 306
HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm	145	°C	ISO 75/Be
HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm	140	°C	ISO 75/Ae
Relative Temp Index, Elec	50	°C	UL 746B
Relative Temp Index, Mech w/impact	50	°C	UL 746B
Relative Temp Index, Mech w/o impact	50	°C	UL 746B
PHYSICAL			
	Value	Unit	Standard
Mold Shrinkage on Tensile Bar, flow (2)	0.3 - 0.4	%	SABIC Method
Density	1.45	g/cm ³	ISO 1183
Water Absorption, (23°C/sat)	0.25	%	ISO 62
Moisture Absorption (23°C / 50% RH)	0.06	%	ISO 62
Melt Volume Rate, MVR at 280°C/10.0 kg	19	cm ³ /10 min	ISO 1133
ELECTRICAL			
	Value	Unit	Standard
Volume Resistivity	1.E+15	Ohm-cm	IEC 60093
Surface Resistivity, ROA	>1.E+15	Ohm	IEC 60093
Dielectric Strength, in oil, 3.2 mm	18	kV/mm	IEC 60243-1
Relative Permittivity, 50/60 Hz	2.9	-	IEC 60250
Relative Permittivity, 1 MHz	2.9	-	IEC 60250

Dissipation Factor, 50/60 Hz	0.004	-	IEC 60250
Dissipation Factor, 1 MHz	0.004	-	IEC 60250
Comparative Tracking Index	250	V	IEC 60112
FLAME CHARACTERISTICS		Value	Unit
UL Recognized, 94V-1 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	3	mm	UL 94
Glow Wire Flammability Index 960°C, passes at	2.5	mm	IEC 60695-2-12
Oxygen Index (LOI)	35	%	ISO 4589

Source GMD, last updated:06/05/1998

Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	100 - 120	°C
Drying Time	2 - 3	hrs
Melt Temperature	280 - 300	°C
Nozzle Temperature	260 - 280	°C
Front - Zone 3 Temperature	280 - 300	°C
Middle - Zone 2 Temperature	260 - 280	°C
Rear - Zone 1 Temperature	240 - 260	°C
Hopper Temperature	60 - 80	°C
Mold Temperature	80 - 120	°C

Source GMD, last updated:06/05/1998

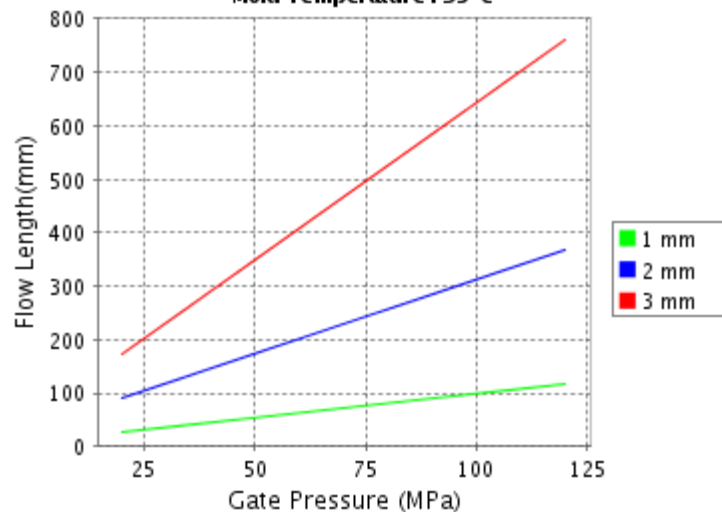
CALCULATED FLOW LENGTH INDICATION

Moldflow® Radial Flow Analysis

LNP Staramide DBG014

Melt Temperature : 270°C

Mold Temperature : 95°C



Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.

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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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