

## Noryl\* Resin FN150X

Americas: COMMERCIAL

Improved reliability and productivity. Thin wall capability. UL94 V-0/5VA rated. All data at 20% weight reduction and 0.250" wall.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
FOAM - MECHANICAL 6.4 mm Wt Reduction	20	%	-
Tensile Stress, yield, 6.35 mm	28	MPa	ASTM D 638
Tensile Stress, break, 6.35 mm	28	MPa	ASTM D 638
Tensile Strain, yield, 6.35 mm	7.3	%	ASTM D 638
Tensile Strain, break, 6.35 mm	14	%	ASTM D 638
Flexural Stress, yield, 6.4 mm	52	MPa	ASTM D 790
Flexural Modulus, 6.4 mm	1740	MPa	ASTM D 790
Hardness, Rockwell R	121	-	ASTM D 785
Taber Abrasion, CS-17, 1 kg	152	mg/1000cy	ASTM D 1044
<b>IMPACT</b>			
FOAM - IMPACT 6.4 mm Wt Reduction	20	%	-
Izod Impact, unnotched, 23°C, 6.4mm	341	J/m	ASTM D 4812
<b>THERMAL</b>			
FOAM - THERMAL 6.4mm Wt Reduction	20	%	-
Vicat Softening Temp, Rate B/50	110	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed	89	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	73	°C	ASTM D 648
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
<b>PHYSICAL</b>			
FOAM - PHYSICAL 6.4mm Wt Reduction	20	%	-
Specific Gravity	1.12	-	ASTM D 792
Water Absorption, 24 hours	0.06	%	ASTM D 570
Mold Shrinkage, flow, 6.4 mm	0.6 - 0.8	%	SABIC Method
Mold Shrinkage, xflow, 6.4 mm	0.6 - 0.8	%	SABIC Method
<b>FLAME CHARACTERISTICS</b>			
FOAM - Flame Class Minimum Density	0.9	g/cm <sup>3</sup>	-
UL Recognized, 94V-0 Flame Class Rating (3)	3.98	mm	UL 94
UL Recognized, 94-5VA Rating (3)	3.98	mm	UL 94
Radiant Panel Listing	YES	-	UL Tested

Source GMD, last updated:07/01/1992

### Processing

Parameter	Value	Unit
Structural Foam Molding		
Blowing Agent, Physical System	Nitrogen Gas	-
Blowing Agent, Chemical System	FNC30X	-
Concentration Range (Blowing Agent)	1 - 3	%

Recommended Concentration (Blowing Agent)	2	%
Drying Temperature (Resin)	70 - 80	°C
Drying Time (Resin)	2 - 4	hrs
Drying Time (Resin, Cumulative)	8	hrs
Melt Temperature	270 - 310	°C
Nozzle Temperature	270 - 305	°C
Front Temperature	270 - 305	°C
Middle Temperature	270 - 305	°C
Rear Temperature	230 - 260	°C
Mold Temperature	25 - 55	°C

Source GMD, last updated:07/01/1992

- Drying is not required/recommended.

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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