

## Noryl\* Resin HFG300

Americas: LIMITED USE

PRELIMINARY DATA. 30% glass reinforced, 212F (100C) HDT.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
	Value	Unit	Standard
<b>MECHANICAL</b>			
Tensile Stress, brk, Type I, 5 mm/min	102	MPa	ASTM D 638
Tensile Strain, brk, Type I, 5 mm/min	7	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span	132	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span	6850	MPa	ASTM D 790
Hardness, Rockwell M	87	-	ASTM D 785
Taber Abrasion, CS-17, 1 kg	35	mg/1000cy	ASTM D 1044
<b>IMPACT</b>			
Izod Impact, notched, 23°C	96	J/m	ASTM D 256
<b>THERMAL</b>			
HDT, 1.82 MPa, 6.4 mm, unannealed	100	°C	ASTM D 648
CTE, -30°C to 30°C, flow	3.24E-05	1/°C	ASTM D 696
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>			
Specific Gravity	1.32	-	ASTM D 792
Water Absorption, 24 hours	0.06	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.2 - 0.3	%	SABIC Method
<b>ELECTRICAL</b>			
Volume Resistivity	1.E+17	Ohm-cm	ASTM D 257
Dielectric Strength, in air, 3.2 mm	24	kV/mm	ASTM D 149
<b>FLAME CHARACTERISTICS</b>			
UL Recognized, 94V-1 Flame Class Rating (3)	1.57	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	1.77	mm	UL 94
UL Recognized, 94-5VA Rating (3)	2.48	mm	UL 94

Source GMD, last updated:12/29/1999

### Processing

Parameter	Value	Unit
<b>Injection Molding</b>		
Drying Temperature	90 - 95	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	255 - 280	°C
Nozzle Temperature	255 - 280	°C
Front - Zone 3 Temperature	245 - 280	°C
Middle - Zone 2 Temperature	230 - 275	°C
Rear - Zone 1 Temperature	220 - 270	°C

Mold Temperature	65 - 90	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	20 - 100	rpm
Shot to Cylinder Size	30 - 70	%
Vent Depth	0.038 - 0.051	mm

Source GMD, last updated:12/29/1999

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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