

## Noryl\* Resin STN15HF

Americas: COMMERCIAL

Automotive interiors. Improved flow characteristics/overall processing economy. 240F DTUL. High impact/good property retention after heat ageing.

### Property

TYPICAL PROPERTIES <sup>(1)</sup>			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	46	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	70	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	69	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	1990	MPa	ASTM D 790
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	453	J/m	ASTM D 256
Izod Impact, notched, -20°C	250	J/m	ASTM D 256
Izod Impact, notched, -40°C	224	J/m	ASTM D 256
Instrumented Impact Energy @ peak, 23°C	36	J	ASTM D 3763
Instrumented Impact Energy @ peak, -30	24	J	ASTM D 3763
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 6.4 mm, unannealed	118	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	115	°C	ASTM D 648
CTE, 0°C to 100°C, flow	1.17E-04	1/°C	ASTM E 831
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.04	-	ASTM D 792
Water Absorption, 24 hours	0.2	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method

Source GMD, last updated:01/05/2000

### Processing

Parameter	Value	Unit
Injection Molding		
Drying Temperature	95 - 105	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	265 - 295	°C
Nozzle Temperature	265 - 295	°C
Front - Zone 3 Temperature	255 - 295	°C
Middle - Zone 2 Temperature	245 - 290	°C
Rear - Zone 1 Temperature	230 - 280	°C
Mold Temperature	65 - 95	°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:01/05/2000

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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