



## Noryl\* Resin N190HF

**Asia Pacific: COMMERCIAL** 

## **Property**

TYPICAL PROPERTIES (1)			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yield	539	MPa	SABIC - Japan Method
Tensile Strain, break	45 - 45	%	SABIC - Japan Method
Flexural Stress	79	MPa	ASTM D 790
Flexural Modulus	2250	MPa	ASTM D 790
Hardness, Rockwell R	114	-	ASTM D 785
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	137	J/m	ASTM D 256
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 3.2 mm, unannealed	90	°C	ASTM D 648
CTE, -30°C to 30°C	7.E-05 - 7.E-05	1/°C	TMA
PHYSICAL	Value	Unit	Standard
Specific Gravity	1.1	-	ASTM D 792
Water Absorption, 24 hours	0.07	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm	0.5 - 0.7	%	SABIC Method
ELECTRICAL	Value	Unit	Standard
Surface Resistivity	1.E+15	Ohm	ASTM D 257
Relative Permittivity, 50/60 Hz	2.78	-	ASTM D 150
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-0 Flame Class Rating (3)	1.5	mm	UL 94
UL Recognized, 94-5VB Rating (3)	2.5	mm	UL 94

Source GMD, last updated:01/27/2000

## **Processing**

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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