

Noryl* Resin EN185

Americas: COMMERCIAL

Extrusion grade. Excellent impact strength. 185F (85C) DTUL. UL94 V-1 rated.

Property

TYPICAL PROPERTIES ⁽¹⁾			
MECHANICAL	Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min	42	MPa	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min	50	%	ASTM D 638
Flexural Stress, yld, 2.6 mm/min, 100 mm span	67	MPa	ASTM D 790
Flexural Modulus, 2.6 mm/min, 100 mm span	2270	MPa	ASTM D 790
Hardness, Rockwell R	113	-	ASTM D 785
IMPACT	Value	Unit	Standard
Izod Impact, notched, 23°C	389	J/m	ASTM D 256
Izod Impact, notched, -40°C	160	J/m	ASTM D 256
Gardner, -30°C	24	J	ASTM D 3029
Gardner, -40°C	13	J	ASTM D 3029
THERMAL	Value	Unit	Standard
HDT, 0.45 MPa, 6.4 mm, unannealed	93	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	82	°C	ASTM D 648
CTE, -40°C to 95°C, flow	7.38E-05	1/°C	ASTM E 831
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
Specific Gravity	1.08	-	ASTM D 792
Water Absorption, 24 hours	0.07	%	ASTM D 570
ELECTRICAL	Value	Unit	Standard
Dielectric Strength, in oil, 3.2 mm	24.8	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	2.8	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.004	-	ASTM D 150
Arc Resistance, Tungsten {PLC}	7	PLC Code	ASTM D 495
Hot Wire Ignition {PLC}	1	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	4	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	0	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
Dissipation Factor, 1 MHz	0.0035	-	IEC 60250
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94V-1 Flame Class Rating (3)	1.49	mm	UL 94
UL Recognized, 94V-0 Flame Class Rating (3)	2.99	mm	UL 94
CSA (See File for complete listing)	LS88480	File No.	CSA LISTED
Radiant Panel Listing	YES	-	UL Tested

Source GMD, last updated:01/05/2000

Processing

Parameter

Extrusion	Value	Unit
Drying Temperature	90 - 100	°C
Drying Time	2 - 4	hrs
Drying Time (Cumulative)	8	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	195 - 210	°C
Barrel - Zone 1 Temperature	170	°C
Barrel - Zone 2 Temperature	170	°C
Barrel - Zone 3 Temperature	190	°C
Barrel - Zone 4 Temperature	190	°C
Adapter Temperature	205	°C
Die Temperature	205	°C

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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