

Product Texts

NORYL GTX™ APS430 resin is a 30% glass reinforced alloy of Polyphenylene Ether (PPE) + Polyphenylene Sulfide (PPS). This injection moldable grade has a UL V0 flame rating, non-brominated, non-chlorinated FR, high stiffness, excellent chemical resistance, and high heat resistance. NORYL GTX APS430 resin is an excellent candidate for electrical and lighting connector applications.

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Molding shrinkage, parallel	0.8	%	ISO 294-4, 2577
Molding shrinkage, normal	0.1	%	ISO 294-4, 2577
ASTM Data			
Melt Flow Index, MFI	43.6	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-
Mold Shrinkage, MD	0.005	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Yield strain	1.2	%	ISO 527
Stress at break	92	MPa	ISO 527
Charpy impact strength, -30°C, 3mm	27	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	16	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	7	kJ/m ²	ISO 179/1eA
ASTM Data			
Flexural Modulus	8620	MPa	ASTM D 790
Flexural Strength	166	MPa	ASTM D 790
Izod Impact notched, 1/8 in	78	J/m	ASTM D 256
Other Standards^[5]			
Tensile Strength at Yield	122	MPa	Producer Method
Elongation at Break	10	%	Producer Method

S: These properties are reported by the producer according standards that are different to our defaults.

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	233	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	58	E-6/K	ISO 11359-1/-2
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	0.8	mm	-
Yellow Card available	yes	-	-
ASTM Data			
UL 94 Flame rating	V-0	-	UL 94
Thickness tested	0.8	mm	-
DTUL @ 264 psi	255	°C	ASTM D 648

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	150	-	IEC 60112
ASTM Data			
Dielectric Constant, 60 Hz	3.3	-	ASTM D 150
Surface Resistivity	1E16	Ohm	ASTM D 257
Volume Resistivity	2.1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Water Absorption, 24hr	0.02	%	ASTM D 570
Density	1480	kg/m ³	ASTM D 792

Characteristics

Processing

Injection Molding

Special Characteristics

Flame retardant, Halogen-free, Heat stabilized or stable to heat

Chemical Resistance

General Chemical Resistance

Applications

Electrical and Electronical

Regional Availability

Europe