

Product Texts

NORYL™ FE1630PW resin is a 30% glass reinforced blend of polyphenylene ether (PPE) + crystal clear polystyrene (ccPS). This injection moldable material is FC EU, FDA food contact compliant, NSF/ANSI 61*ACS, WRAS, KTW, and W270 listed for global potable water use. NORYL FE1630PW resin exhibits excellent long-term hydrolytic stability, very low moisture absorption, heat / hot water resistance and is an excellent candidate for a variety of water management applications such as pump housings, impellers, shower/faucet, membrane housings and valves. *NSF certification is color dependent.

UL Yellow Card Link [E45329-101521740](https://www.ul.com/yellow-card/E45329-101521740)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	30	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	10	kg	-
ASTM Data			
Melt Flow Index, MFI	9	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	9600	MPa	ISO 527
Stress at break	133	MPa	ISO 527
Strain at break	2.5	%	ISO 527
Flexural modulus	8120	MPa	ISO 178
Charpy impact strength, +23°C	30	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	30	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	10	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	9	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C, 4mm	30	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	30	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	8	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	7	kJ/m ²	ISO 180/1A
Ball indentation hardness	240	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	9570	MPa	ASTM D 638
Tensile Strength at Break	134	MPa	ASTM D 638
Elongation at Break	2.4	%	ASTM D 638
Flexural Modulus	7760	MPa	ASTM D 790
Izod Impact notched, 1/8 in	85	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	75	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	505	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	165	°C	ISO 306
Vicat softening temperature, B	154	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	158	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-
Glow Wire Flammability Index (GWFI)	775	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	800	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-
ASTM Data			
DTUL @ 264 psi	145	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Water absorption	0.2	%	Sim. to ISO 62

NORYL™ Resin FE1630PW - Europe

(PPE+PS)-GF30

Saudi Basic Industries Corporation (SABIC)

Humidity absorption	0.06	%	Sim. to ISO 62
Density	1300	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	2 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	290 - 320	°C	-
Mold temperature	80 - 120	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	270 - 280	°C	-
Zone 2	280 - 300	°C	-
Zone 3	300 - 310	°C	-

Characteristics**Processing**

Injection Molding

Certifications

Food contact, Food approval FDA 21 CFR

Chemical Resistance

Hydrolytically Stable

Regional Availability

Europe