

Product Texts

NORYL WM330G resin is a 30% glass reinforced blend of impact modified polyphenylene ether (PPE) + polystyrene (PS). This injection moldable material is FC EU, FDA food contact compliant, NSF/ANSI 61, ACS, WRAS, KTW, and W270 listing for global potable water use for specific colors is available. NORYL WM330G resin exhibits good fatigue performance, 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.

UL Yellow Card Link [E45329-104135685](https://www.ul.com/yellow-card/E45329-104135685)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	26	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	10	kg	-
Thermal conductivity of melt	0.23	W/(m K)	-
Spec. heat capacity of melt	2400	J/(kg K)	-
Ejection temperature	142	°C	-
ASTM Data			
Melt Flow Index, MFI	30	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	10	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	9470	MPa	ISO 527
Stress at break	131	MPa	ISO 527
Strain at break	2.4	%	ISO 527
Flexural modulus	8440	MPa	ISO 178
Charpy impact strength, +23°C	45	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	50	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C	12	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	42	kJ/m ²	ISO 180/1U
Izod impact strength, -30°C, 4mm	45	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 4mm	12	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	9	kJ/m ²	ISO 180/1A
ASTM Data			
Tensile Modulus	9425	MPa	ASTM D 638
Tensile Strength at Break	131	MPa	ASTM D 638
Elongation at Break	3	%	ASTM D 638
Flexural Modulus	7650	MPa	ASTM D 790
Izod Impact notched, 1/8 in	105	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	85	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	520	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, A	164	°C	ISO 306
Vicat softening temperature, B	154	°C	ISO 306
Vicat softening temperature, 120°C/h 10N	167	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	156	°C	ISO 306
Coeff. of linear therm. expansion, parallel	18.4	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	59.1	E-6/K	ISO 11359-1/-2
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	-

NORYL™ Resin WM330G - Europe

(PPE+PS)-GF30

Saudi Basic Industries Corporation (SABIC)

ASTM Data

DTUL @ 66 psi	153	°C	ASTM D 648
DTUL @ 264 psi	147	°C	ASTM D 648

Other properties	Value	Unit	Test Standard
Water absorption	0.2	%	Sim. to ISO 62
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 - 330	°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

Special Characteristics

High impact or impact modified

Chemical Resistance

Hydrolytically Stable

Certifications

Food contact, Food approval FDA 21 CFR

Regional Availability

Europe