

Product Texts

NORYL™ 731S resin is a non-reinforced blend of Polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable resin is FC EU, FDA food contact compliant and has NSF/ANSI 61, ACS, WRAS, and KTW/W270 listings for selected colors and manufacturing locations. NORYL 731S resin exhibits good surface appearance, high ductility, low moisture absorption, dimensional and hydrolytic stability. NORYL 731S resin is an excellent candidate for a variety of water management applications such as valves, filtration components, and water meter internals.

UL Yellow Card Link [E45329-236745](https://www.ulprospector.com/usa/Products/Plastics/731S)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	5	cm ³ /10min	ISO 1133
Temperature	280	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2300	MPa	ISO 527
Yield stress	55	MPa	ISO 527
Yield strain	5	%	ISO 527
Stress at break	50	MPa	ISO 527
Strain at break	30	%	ISO 527
Flexural modulus	2200	MPa	ISO 178
Charpy notched impact strength, +23°C	15	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	5	kJ/m ²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	15	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	5	kJ/m ²	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
ISO Data			
Vicat softening temperature, B	135	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°C	ISO 306
Burning behav. at 1.5 mm nom. thickn.	HB	class	IEC 60695-11-10
Thickness tested	1.5	mm	-

Other properties	Value	Unit	Test Standard
Water absorption	0.23	%	Sim. to ISO 62
Humidity absorption	0.06	%	Sim. to ISO 62
Density	1060	kg/m ³	ISO 1183

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	100 - 120	°C	-
Pre-drying - Time	2 - 3	h	-
Melt temperature	280 - 300	°C	-
Mold temperature	80 - 120	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	240 - 260	°C	-
Zone 2	260 - 280	°C	-
Zone 3	280 - 300	°C	-

Characteristics

Processing

Injection Molding

Chemical Resistance

Hydrolytically Stable

Certifications

Food contact, Food approval FDA 21 CFR

Regional Availability

Europe