

**Product Texts**

NORYL™ HN731SE resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade is US FDA and European Food Contact approved, biocompatible (ISO10993 or USP Class VI), RoHS compliant, and it is subject to SABIC's Healthcare management of change and formulation lock. NORYL HN731SE resin exhibits good impact resistance, excellent hydrolytical stability, and chemical resistance. This light weight and colorable material is an excellent candidate for medical device and pharmaceutical applications such as drug-delivery inhalers.

UL Yellow Card Link [E45329-236745](https://www.ul.com/yellow-card/E45329-236745)

Processing/Physical Characteristics	Value	Unit	Test Standard
<b>ISO Data</b>			
Melt volume-flow rate, MVR	8	cm <sup>3</sup> /10min	ISO 1133
Temperature	280	°C	-
Load	5	kg	-

Mechanical properties	Value	Unit	Test Standard
<b>ISO Data</b>			
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 <sup>2</sup>	ISO 179/1eA
Charpy notched impact strength, -30°C	5	kJ/m <sup>2</sup>	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	15	kJ/m <sup>2</sup>	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	5	kJ/m <sup>2</sup>	ISO 180/1A

Thermal properties	Value	Unit	Test Standard
<b>ISO Data</b>			
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 <sup>3</sup>	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**

General Chemical Resistance

**Certifications**

Food contact, Food approval FDA 21 CFR, RoHS compliant

**Regional Availability**

Europe