NORYL™ Resin N1250 - Asia

(PPE+PS) Saudi Basic Industries Corporation (SABIC)

Product Texts

NORYL™ N1250 resin is a non-reinforced blend of polyphenylene ether (PPE) + high impact polystyrene (HIPS). This injection moldable grade contains non-brominated, non-chlorinated flame retardant and carries a UL94 flame rating of 5VA at 2.5mm and V0 at 0.75mm. NORYL N1250 resin offers thin wall FR capability, enhanced dimensional stability, high heat resistance, low moisture absorption, and good electrically insulating properties. It may be an excellent candidate for a variety of consumer electronic applications such as charger and adapter housings.

UL Yellow Card Link E45587-237098

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	**12**	cm³/10min	ISO 1133
Temperature	**280**	°C	-
Load	**5**	kg	-
Molding shrinkage, parallel	**0.5**	%	ISO 294-4, 2577

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	**2620**	MPa	ISO 527
Yield stress	**75**	MPa	ISO 527
Yield strain	**4.5**	%	ISO 527
Stress at break	**55**	MPa	ISO 527
Strain at break	**8**	%	ISO 527
Flexural modulus	**2530**	MPa	ISO 178
Charpy notched impact strength, +23°C	**7**	kJ/m²	ISO 179/1eA
Izod notched impact strength, +23°C, 4mm	**8**	kJ/m²	ISO 180/1A
Izod notched impact strength, -30°C, 4mm	**6**	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	**2700**	MPa	ASTM D 638
Tensile Strength at Break	**62**	MPa	ASTM D 638
Elongation at Yield	**5**	%	ASTM D 638
Elongation at Break	**15**	%	ASTM D 638
Flexural Modulus	**2800**	MPa	ASTM D 790
Izod Impact notched, 1/8 in	**100**	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	**119**	°C	ISO 75-1/-2
Vicat softening temperature, 120°C/h 50N	**139**	°C	ISO 306
Burning behav. at thickness h	**V-2**	class	IEC 60695-11-10
Thickness tested	**0.4**	mm	-
Burning behav. 5V at thickness h	**5VA**	class	IEC 60695-11-20
Thickness tested	**2.5**	mm	-
Glow Wire Flammability Index (GWFI)	**960**	°C	IEC 60695-2-12
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Glow Wire Ignition Temperature (GWIT)	**775**	°C	IEC 60695-2-13
GWIT - thickness tested (1)	**1**	mm	-
Glow Wire Ignition Temperature (GWIT)	**775**	°C	IEC 60695-2-13
GWIT - thickness tested (3)	**3**	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	**250**	-	IEC 60112

Other properties	Value	Unit	Test Standard
Water absorption	**0.25**	%	Sim. to ISO 62
Humidity absorption	**0.05**	%	Sim. to ISO 62
Density	**1100**	kg/m³	ISO 1183
Density	**1100**	kg/m³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	**105 - 110**	°C	-
Pre-drying - Time	**3 - 4**	h	-
Processing humidity	**≤0.02**	%	-
Melt temperature	**275 - 305**	°C	-
Mold temperature	**70 - 100**	°C	-
Zone 1	**245 - 295**	°C	-
Zone 2	**255 - 300**	°C	-
Zone 3	**265 - 305**	°C	-
Screw speed	**20 - 100**	rpm	-
Back pressure	**0.3 - 0.7**	MPa	-

Characteristics

Processing
Injection Molding

Additives
Flame retarding agent

Special Characteristics
Flame retardant

Applications
Automotive

Regional Availability
Asia Pacific