

FLEX NORYL™ Resin WCP841 - Asia

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

Product Texts

FLEX NORYL™ WCP841 resin is flexible, non-reinforced injection moldable blend of polyphenylene ether (PPE) + thermoplastic elastomer (TPE). This material contains non-halogenated flame retardant and carries a UL94 flame rating of V0 at 6mm. FLEX NORYL WCP841 resin is intended for evaluation in over-molding applications such as plugs, strain reliefs, and connectors. It has a Shore A Hardness reading of 84 and exhibits low specific gravity, very low water absorption, and dimensional stability.

UL Yellow Card Link [E207780-101939210](https://www.ul.com/yellow-card/E207780-101939210)

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Melt Flow Index, MFI	27	g/10min	ASTM D 1238
Temperature	250	°C	-
Load	2.16	kg	-
Mold Shrinkage, MD	0.95	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.75	mm/mm	ASTM D 955

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Stress at break	7	MPa	ISO 527
Strain at break	50	%	ISO 527
ASTM Data			
Tensile Strength at Break	6	MPa	ASTM D 638
Elongation at Break	150	%	ASTM D 638
Shore A Hardness	84	-	ASTM D 2240

Thermal properties	Value	Unit	Test Standard
ISO Data			
Burning behav. at thickness h	V-0	class	IEC 60695-11-10
Thickness tested	6.0	mm	-
Glow Wire Flammability Index (GWFI)	750	°C	IEC 60695-2-12
GWFI - thickness tested (1)	3	mm	-
Glow Wire Ignition Temperature (GWIT)	750	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-

Electrical properties	Value	Unit	Test Standard
ISO Data			
Comparative tracking index	600	-	IEC 60112
ASTM Data			
Volume Resistivity	>1E15	Ohm*cm	ASTM D 257

Other properties	Value	Unit	Test Standard
Density	1010	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	60 - 80	°C	-
Pre-drying - Time	4 - 6	h	-
Processing humidity	≤0.01	%	-
Melt temperature	220 - 250	°C	-
Mold temperature	40 - 60	°C	-
Zone 1	180 - 220	°C	-
Zone 2	210 - 240	°C	-
Zone 3	220 - 250	°C	-
Screw speed	30 - 80	rpm	-
Back pressure	3 - 10	MPa	-

Characteristics

Processing

Injection Molding

Additives

Flame retarding agent

Special Characteristics

Flame retardant

Regional Availability

Asia Pacific