

FLEX NORYL™ Resin WCP761 - Americas

(PPE+TPE)

Saudi Basic Industries Corporation (SABIC)

Product Texts

FLEX NORYL™ WCP761 resin is a high flow, 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 WCP761 resin is intended for evaluation in over-molding applications such as plugs, strain reliefs, and connectors. It has a Shore A Hardness reading of 78 and exhibits low specific gravity, very low water absorption, and dimensional stability.

Processing/Physical Characteristics

| | Value | Unit | Test Standard |
|----------------------|-------|---------|---------------|
| ASTM Data | | | |
| Melt Flow Index, MFI | 20 | g/10min | ASTM D 1238 |
| Temperature | 250 | °C | - |
| Load | 2.16 | kg | - |
| Mold Shrinkage, MD | 1.08 | mm/mm | ASTM D 955 |
| Mold Shrinkage, TD | 1.1 | mm/mm | ASTM D 955 |

Mechanical properties

| | Value | Unit | Test Standard |
|---------------------------|-------|------|---------------|
| ISO Data | | | |
| Stress at break | 8 | MPa | ISO 527 |
| Strain at break | 50 | % | ISO 527 |
| ASTM Data | | | |
| Tensile Strength at Break | 7 | MPa | ASTM D 638 |
| Elongation at Break | 165 | % | ASTM D 638 |
| Shore A Hardness | 78 | - | ASTM D 2240 |

Thermal properties

| | Value | Unit | Test Standard |
|-------------------------------------|-------|------|----------------|
| ISO Data | | | |
| Glow Wire Flammability Index (GWFI) | 960 | °C | IEC 60695-2-12 |
| GWFI - thickness tested (3) | 3 | mm | - |

Electrical properties

| | Value | Unit | Test Standard |
|-----------------------------|-------|--------|---------------|
| ISO Data | | | |
| Relative permittivity, 1MHz | 2.5 | - | IEC 62631-2-1 |
| Dissipation factor, 1MHz | 20 | E-4 | IEC 62631-2-1 |
| Comparative tracking index | 600 | - | IEC 60112 |
| ASTM Data | | | |
| Volume Resistivity | >1E15 | Ohm*cm | ASTM D 257 |

Other properties

| | Value | Unit | Test Standard |
|---------|-------|-------------------|---------------|
| Density | 1050 | kg/m ³ | ASTM D 792 |

Processing Recommendation Injection Molding

| | Value | Unit | Test Standard |
|--------------------------|-----------|------|---------------|
| Pre-drying - Temperature | 65 - 75 | °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

Special Characteristics

Flame retardant

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Additives

Flame retarding agent

Regional Availability

North America