

**LNP™ THERMOCOMP™ Compound ECF62**

PEI-(GF+CF)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

LNP THERMOCOMP ECF62 compound is based on Polyetherimide (PEI) resin containing 30% glass fiber, 10% carbon fiber. Added features of this grade include: Electrically Conductive.

| <b>Processing/Physical Characteristics</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|--|--------------|-------------|----------------------|
| <b>ASTM Data</b>                           |              |             |                      |
| Mold Shrinkage, MD                         | <b>0.15</b>  | mm/mm       | ASTM D 955           |
| Mold Shrinkage, TD                         | <b>0.35</b>  | mm/mm       | ASTM D 955           |

| <b>Mechanical properties</b>  | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|-------------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>              |              |             |                      |
| Tensile Modulus               | <b>17920</b> | MPa         | ASTM D 638           |
| Tensile Strength at Break     | <b>185</b>   | MPa         | ASTM D 638           |
| Elongation at Break           | <b>1.5</b>   | %           | ASTM D 638           |
| Flexural Modulus              | <b>15850</b> | MPa         | ASTM D 790           |
| Flexural Strength             | <b>268</b>   | MPa         | ASTM D 790           |
| Izod Impact notched, 1/8 in   | <b>69</b>    | J/m         | ASTM D 256           |
| Izod Impact unnotched, 1/8 in | <b>485</b>   | J/m         | ASTM D 256           |

| <b>Thermal properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|---------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>          |              |             |                      |
| DTUL @ 264 psi            | <b>212</b>   | °C          | ASTM D 648           |

| <b>Electrical properties</b> | <b>Value</b> | <b>Unit</b> | <b>Test Standard</b> |
|------------------------------|--------------|-------------|----------------------|
| <b>ASTM Data</b>             |              |             |                      |
| Volume Resistivity           | <b>1E11</b>  | Ohm*cm      | ASTM D 257           |

| <b>Other properties</b> | <b>Value</b> | <b>Unit</b>       | <b>Test Standard</b> |
|-------------------------|--------------|-------------------|----------------------|
| Density                 | <b>1570</b>  | kg/m <sup>3</sup> | ASTM D 792           |

| <b>Processing Recommendation Injection Molding</b> | <b>Value</b>     | <b>Unit</b> | <b>Test Standard</b> |
|--|------------------|-------------|----------------------|
| Pre-drying - Temperature                           | <b>150</b>       | °C          | -                    |
| Pre-drying - Time                                  | <b>4 - 6</b>     | h           | -                    |
| Processing humidity                                | <b>≤0.02</b>     | %           | -                    |
| Melt temperature                                   | <b>360 - 400</b> | °C          | -                    |
| Mold temperature                                   | <b>140 - 180</b> | °C          | -                    |
| Zone 1   | <b>360 - 380</b> | °C          | -                    |
| Zone 2   | <b>370 - 390</b> | °C          | -                    |
| Zone 3   | <b>380 - 400</b> | °C          | -                    |
| Back pressure                                      | <b>0.3 - 0.7</b> | MPa         | -                    |

**Characteristics****Processing**

Injection Molding

**Regional Availability**

North America, Europe, Asia Pacific

**Special Characteristics**

Increased electrical conductivity