

**LNP™ FARADEx™ Compound WX08014**

PBT-MEF(x)

Saudi Basic Industries Corporation (SABIC)

**Product Texts**

LNP FARADEx WX08014 compound is based on Polybutylene Terephthalate (PBT) resin containing stainless steel fiber. Added features of this grade include: EMI/RFI shielding, Electrically Conductive, Flame Retardant.

| Processing/Physical Characteristics | Value | Unit | Test Standard   |
|-------------------------------------|-------|------|-----------------|
| <b>ISO Data</b>                     |       |      |                 |
| Molding shrinkage, parallel         | 1.9   | %    | ISO 294-4, 2577 |
| Molding shrinkage, normal           | 2.2   | %    | ISO 294-4, 2577 |

| Mechanical properties                    | Value | Unit              | Test Standard |
|--|-------|-------------------|---------------|
| <b>ISO Data</b>                          |       |                   |               |
| Tensile Modulus                          | 3200  | MPa               | ISO 527       |
| Yield stress                             | 44    | MPa               | ISO 527       |
| Yield strain                             | 2     | %                 | ISO 527       |
| Stress at break                          | 43    | MPa               | ISO 527       |
| Strain at break                          | 2.5   | %                 | ISO 527       |
| Flexural modulus                         | 3400  | MPa               | ISO 178       |
| Izod impact strength, +23°C, 4mm         | 15    | kJ/m <sup>2</sup> | ISO 180/1U    |
| Izod notched impact strength, +23°C, 4mm | 3     | kJ/m <sup>2</sup> | ISO 180/1A    |

| Thermal properties                          | Value | Unit  | Test Standard  |
|---|-------|-------|----------------|
| <b>ISO Data</b>                             |       |       |                |
| Temp. of deflection under load, 1.80 MPa    | 76    | °C    | ISO 75-1/-2    |
| Temp. of deflection under load, 0.45 MPa    | 150   | °C    | ISO 75-1/-2    |
| Coeff. of linear therm. expansion, parallel | 97    | E-6/K | ISO 11359-1/-2 |
| Coeff. of linear therm. expansion, normal   | 111   | E-6/K | ISO 11359-1/-2 |

| Electrical properties | Value | Unit | Test Standard |
|-----------------------|-------|------|---------------|
| <b>ASTM Data</b>      |       |      |               |
| Surface Resistivity   | 1000  | Ohm  | ASTM D 257    |

| Other properties | Value | Unit              | Test Standard |
|------------------|-------|-------------------|---------------|
| Density          | 1640  | kg/m <sup>3</sup> | ISO 1183      |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature                    | 120       | °C   | -             |
| Pre-drying - Time                           | 4         | h    | -             |
| Processing humidity                         | ≤0.05     | %    | -             |
| Melt temperature                            | 245 - 260 | °C   | -             |
| Mold temperature                            | 80 - 100  | °C   | -             |
| Zone 1                                      | 230 - 245 | °C   | -             |
| Zone 2                                      | 245 - 255 | °C   | -             |
| Zone 3                                      | 250 - 260 | °C   | -             |
| Screw speed                                 | 30 - 60   | rpm  | -             |
| Back pressure                               | 0.2 - 0.3 | MPa  | -             |

**Characteristics****Processing**

Injection Molding

**Additives**

Flame retarding agent

**Special Characteristics**

Increased electrical conductivity, Flame retardant

**Features**

EMI Attenuation/Shielding

**Regional Availability**

North America, Europe, Asia Pacific