

Item Description Item ID

PRE-ELEC[®] PP 18147 Preliminary PP18147

PP extrusion compound
Very high electrical conductivity

Typical end product
Applications

EMI-Shielding layers

PRE-ELEC[®] PP 18147 is a very conductive thermoplastic compound based on polypropylene. In addition to low electrical resistivity it has an excellent balance of mechanical properties.

| Special properties | Unit | Value | Method |
|------------------------------------|----------|-------|----------|
| Volume resistivity(*) | Ω.cm | 0,6 | PRE021 |
| General properties | Unit | Value | Method |
| Melt flow rate at 230°C 21.6 kg | g/10 min | 7 | ISO 1133 |
| Mechanical properties | Unit | Value | Method |
| Tensile strength(*) | MPa | 14 | ISO 527 |
| Tensile strain at break(*) | % | 170 | ISO 527 |
| Tensile modulus(*) | MPa | 700 | ISO 527 |
| Hardness, Shore D | - | 58 | ISO 868 |

MFR is measured from granulates

Test specimen: injection moulded rod; Thickness: 10 mm, width: 4 mm

*) extruded tape; Thickness 600-800 µm

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www.premixgroup.com/data-center-main

Processing instructions

| | Unit | Processing range | | |
|------------------------------|------|------------------|---|-----|
| Extrusion | | | | |
| Cylinder temperature profile | °C | 190 | - | 210 |
| Die temperature profile | °C | 200 | - | 220 |
| Tool/Roll temperature | °C | - | - | - |

Notes

Drying of the product is recommended for 2-3 hours at 80°C prior to use.

These parameters are for guidance only. The process parameters should always be optimized for the used equipment. The instructions of the equipment manufacturer should be followed. Caution should be taken when handling molten material as it is extremely hot and may cause severe burns.

Storage

Product-specific details are mentioned in the notes above. The general minimum shelf life for Premix's product is 3 years with the following conditions: 1) original package is unopened, 2) the storage area and conditions provide protection from direct sunlight and significant changes in storage temperature, 3) the product is pre-dried accordingly before use.

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PP18147 -205