

# Item Description Item ID

PP concentrate
Electrically conductive

Typical end product Applications

PRE-ELEC® PP19279 PP19279

Corrugated board
Sheets
Profiles

PRE-ELEC® PP 19279 is electrically conductive thermoplastic concentrate based on polypropylene. Conductivity is achieved by using special conductive carbon black. It contains a high load of carbon black and it can be diluted with virgin or recycled PP. The actual amount should always be tested as it also depends on the processing conditions.

### The values with the exception of MFR are measured from dilution: 30% PP-C, MFI 4 (230°C/2.16 kg).

| Special properties   | Unit               | Value                   | Method                        |
|--|--------------------|-------------------------|-------------------------------|
| Volume resistivity(* Surface resistance(*  | Ω.cm<br>Ω          | 11<br>5E+02             | PRE021<br>IEC 61340-2-3       |
| General properties   | Unit               | Value                   | Method                        |
| Specific gravity Melt flow rate at 230°C   | g/cm3<br>g/10 min  | 1,15                    | ISO 1183<br>ISO 1133          |
| 10.0 kg  | 9, 10 111111       | 1,6                     | 136 1166                      |
|  |                    |                         |                               |
| Mechanical properties  | Unit               | Value                   | Method                        |
| Mechanical properties  Tensile strength(*  | <u>Unit</u><br>MPa | Value<br>27             | Method ISO 527                |
|  |                    |                         |                               |
| Tensile strength(*   | MPa                | 27                      | ISO 527                       |
| Tensile strength(*<br>Tensile strain at break(*  | MPa<br>%           | 27<br>660               | ISO 527<br>ISO 527            |
| Tensile strength(*<br>Tensile strain at break(*<br>Flexural modulus                                    | MPa<br>%<br>MPa    | 27<br>660               | ISO 527<br>ISO 527<br>ISO 178 |
| Tensile strength(*<br>Tensile strain at break(*<br>Flexural modulus<br>Impact strength, Charpy         | MPa<br>%<br>MPa    | 27<br>660<br>1400       | ISO 527<br>ISO 527<br>ISO 178 |
| Tensile strength(* Tensile strain at break(* Flexural modulus Impact strength, Charpy Unnotched, +23°C | MPa<br>%<br>MPa    | 27<br>660<br>1400<br>NB | ISO 527<br>ISO 527<br>ISO 178 |



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Processing instructions

| Extrusion    |                              | Unit | Processing range |
|--------------|------------------------------|------|------------------|
| 27(1) 401011 | Cylinder temperature profile | °C   | 200 - 220        |
|              | Die temperature profile      | °C   | 210 - 220        |
|              | Tool/Roll temperature        | °C   | 90 - 60          |

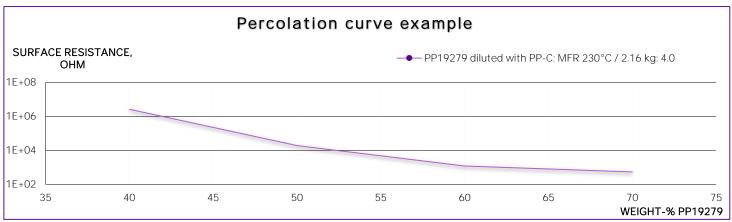
### Notes

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.

#### <u>Storage</u>

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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