

# PRE-ELEC<sup>®</sup> PP 15392

**PP concentrate**  
**Electrically conductive**

**Applications:** **Corrugated board**  
**Sheets**  
**Profiles**

PRE-ELEC<sup>®</sup> PP 15392 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 preferably with PP-C. The actual amount should always be tested as it also depends on the processing parameters.

The values with the exception of MFR and HDT are measured from dilution: 50% PP-C, MFI 3,5 (230 °C/2.16 kg).

| Special properties     | Unit | Value | Method        |
|------------------------|------|-------|---------------|
| Volume resistivity(*)  | Ω.cm | 150   | PRE021        |
| Surface resistance (*) | Ω    | 8E+03 | IEC 61340-2-3 |

| General properties      | Unit              | Value     | Method    |
|-------------------------|-------------------|-----------|-----------|
| Specific gravity        | g/cm <sup>3</sup> | 1,11      | ISO 1183  |
| Melt flow rate at 230°C | g/10 min          |           | ISO 1133  |
| 5.0 kg                  |                   | 0,2       |           |
| 10.0 kg                 |                   | 8,0       |           |
| 21.6 kg                 |                   | 165       |           |
| Mould shrinkage         | %                 | 1.2 - 1.4 | ISO 294-4 |
| HDT, 0.45 MPa           | °C                | 73,4      | ISO 75/Bf |
| HDT, 1.80 MPa           | °C                | 50,3      | ISO 75/Af |

| Mechanical properties       | Unit              | Value | Method  |
|-----------------------------|-------------------|-------|---------|
| Tensile strength (*)        | MPa               | 24    | ISO 527 |
| Yield strength (*)          | MPa               | 16    | ISO 527 |
| Tensile strain at break (*) | %                 | 18    | ISO 527 |
| Tensile strain at yield (*) | %                 | 7     | ISO 527 |
| Flexural modulus            | MPa               | 1265  | ISO 178 |
| Impact strength, Charpy     | kJ/m <sup>2</sup> |       | ISO 179 |
| Unnotched, +23°C            |                   | NB    |         |
| Notched, +23°C              |                   | 64    |         |
| Hardness, Shore A           | -                 | > 90  | ISO 868 |
| Hardness, Shore D           | -                 | 70    | 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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This product is REACH and RoHS compliant

Visit Premix Data Center for more detailed information of our products at [www.premixgroup.com/data-center-main](http://www.premixgroup.com/data-center-main)

## Processing instructions

|                  | Unit                         | Processing range |
|------------------|------------------------------|------------------|
| <b>Extrusion</b> | Cylinder temperature profile | °C 200 - 220     |
|                  | Die temperature profile      | °C 220 - 220     |
|                  | Tool/Roll temperature        | °C 90 - 60       |

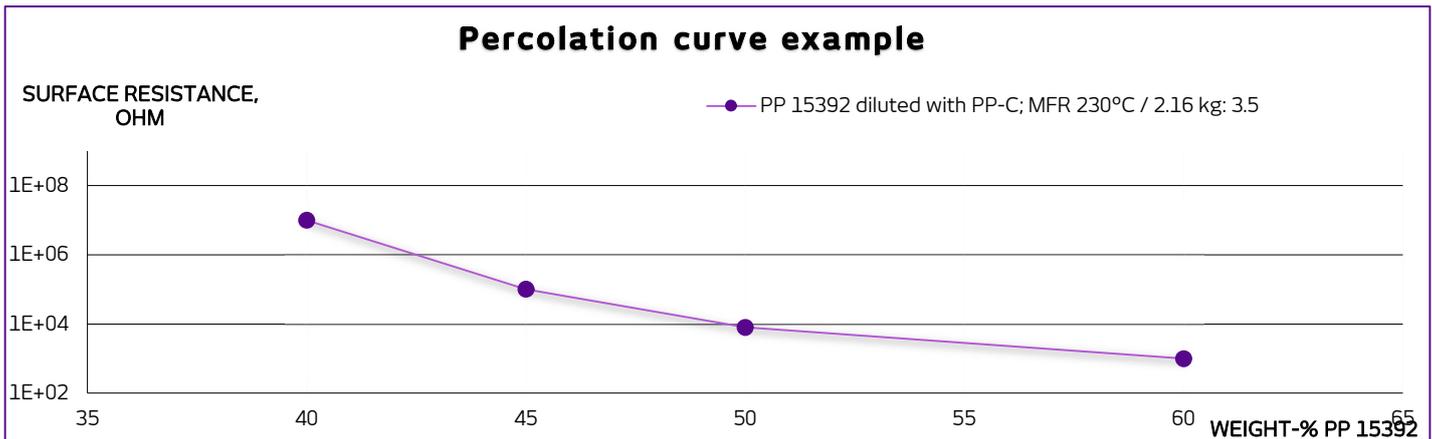
## Notes

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

Processing conditions as with filled PP. 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.



The information in this datasheet represents typical values obtained by us, and shall not be regarded as a product specification. The right to make any changes to the content and appearance of this document is reserved by Premix Oy. We condition that the product will be inspected and qualified by the customer for their process to meet the specific requirements set by application, processing equipment and the end product. The user of this product is held responsible for the evaluation of this product's suitability concerning applied legislation and possible patent infringements. We do not intentionally add or incorporate hazardous substances in our production.

PRE-ELEC<sup>®</sup> is a registered trademark of Premix.

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Contact our Sales and Customer Service teams for more information

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