

Standard grade selection - Properties of PRE-ELEC® grades with compounds

| Polymer Base | Product name | Applications | Compound | Concentrate | Extrusion | Injection moulding | Volume resistivity (Ωcm) | Surface resistance (Ω) | Melt flow rate (g/10min) | Density (g/cm3) | Flexural modulus (MPa) | Hardness (Sh D) |
|--------------|---------------------|--|----------|-------------|-----------|--------------------|--------------------------|------------------------|--------------------------|-----------------|------------------------|-----------------|
| EVA | PRE-ELEC® CP 1515 | Foams | | • | • | | 250 | 5E+3 | 190°C / 5.0 kg: 1.2 | 1.06 | 110 | 47 |
| PE-LD | PRE-ELEC® PE 1271 | Films, FIBC | • | | • | | 70 | 5E+3 | 190°C / 5.0 kg: 1.7 | 1.02 | - | 56 |
| PE-HD | PRE-ELEC® PE 1291 | Sheets, Pipes, Cans & Bins | • | | • | | 50 | 9E+2 | 190°C / 21.6 kg: 6.0 | 1.04 | 1,200 | 71 |
| PE-HD | PRE-ELEC® PE 1296 | Sheets, Cans & Bins, Pipes | | • | • | ◦ | 1 (c) | 3E+2 (c) | 190°C / 21.6 kg: 0.6 | 1.12 | 1,200 (c) | 65 (c) |
| PE-HD | PRE-ELEC® PE 1312 | Cans & Bins | • | | | | 100 | 4E+3 | 190°C / 21.6 kg: 10 | 1.03 | 1,200 | 67 |
| PE-HD | PRE-ELEC® PE 16006 | Cans & Bins | | | | • | | < 1E+7 | 190°C / 21.6 kg: 2.0 | 1.02 | 1,000 | - |
| PE-LD | PRE-ELEC® PE 17800 | Foams | | • | • | | 2 | 3E+2 | 190°C / 10.0 kg: 1.0 | 1.15 | - | - |
| PE-LLD | PRE-ELEC® PE 17840 | Films, Filaments, FIBC, Sheets | | • | • | | 0.7 | out of range | 230°C / 21.6 kg: 4.5 | 1.20 | - | - |
| PE-LD | PRE-ELEC® PE 18381 | Films | • | | • | | 14 | 9E+2 | 190°C / 5.0 kg: 0.5 | 1.05 | 170 | 45 |
| POE | PRE-ELEC® PE 18480 | Flexible Tubes and Profiles | • | | • | | 8 | 4E+2 | 190°C / 10.0 kg: 2.2 | 1.05 | 200 | 47 |
| PE-HD | PRE-ELEC® PE 18594 | Sheets, Boxes & Pallets, Cans & Bins | • | • | • | • | 1 (d) | 1,2E+6 (d) | 190°C / 21.6 kg: 3.1 | 1.14 | 1,375 (d) | 67 (d) |
| PP-H | PRE-ELEC® PP 1353 | Filaments, FIBC | | • | • | ◦ | 180 (e) | 1E+3 (e) | 230C / 10.0 kg: 9.0 | 1.11 | 1,300 (e) | 75 (e) |
| PP-C | PRE-ELEC® PP 1375 | Boxes & Pallets | • | | | • | 80 | 4E+3 | 230°C / 2.16 kg: 20.0 | 0.98 | 1,300 | 65 |
| PP-C | PRE-ELEC® PP 1380 | Technical parts, ECG & EEG electrodes | • | | | • | 3 | 6E+2 | 230°C / 5.0 kg: 1.5 | 1.06 | 1,900 | 72 |
| PP-C | PRE-ELEC® PP 1393 | Sheets | | • | • | ◦ | 4 (f) | 6E+2 (f) | 230°C / 5.0 kg: 0.5 | 1.06 | 1,500 (f) | 71 (f) |
| PP-C | PRE-ELEC® PP 1397 | Sheets | • | | • | ◦ | 60 | 3E+3 | 230°C / 2.16 kg: 1.2 | 0.98 | 1,400 | 74 |
| PP-H | PRE-ELEC® PP 15392 | Sheets | | • | • | ◦ | 150 (g) | 8E+3 (g) | 230°C / 10.0 kg: 8 | 1.11 | 1,265 (g) | 70 (g) |
| PP-C | PRE-ELEC® PP 18999 | Boxes & Pallets | | • | ◦ | • | 15 | 6E+2 | 230°C / 10.0 kg: 2.7 | 1.03 | 200 | 51 |
| PP-C | PRE-ELEC® PP 19136 | Boxes, Crates, Technical parts | • | | • | • | > 5,000 | 7E+6 | 230C / 5.0 kg: 34 | 1.00 | 1,054 | 65 |
| PP-C | PRE-ELEC® PP 19161 | Boxes, Crates, Technical parts | • | | • | • | 90 | 4E+3 | 230°C / 2.16 kg: 3.4 | 1.02 | 1,200 | 65 |
| PP-C | PRE-ELEC® PP 19599 | Boxes, Crates, Technical parts | • | | • | • | < 200 | 2E+3 | 230°C / 5.0 kg: 52 | 1.01 | 1,500 | - |
| PP-C | PRE-ELEC® PP 19625 | Sheets | | • | • | | > 5000 | 1E+5 (j) | 230°C / 5.0 kg: 7 | 1.09 | - | - |
| PP-C | PRE-ELEC® PP 19764 | Pipette tips, consumables | • | | • | • | <20 | 1E+3 | 230°C / 2.16 kg: 19 | 1.00 | 1,600 | 68 |
| PP-C | PRE-ELEC® TP 6735 | Pipette tips, consumables | • | | • | • | <20 | 1E+3 | 230°C / 2.16 kg: 16 | 1.00 | 1,600 | 68 |
| TPE-S | PRE-ELEC® TPE 18416 | Flexible Tubes and Profiles | • | | • | | 3.5 | 4E+2 | 190°C / 21.6 kg: 9.8 | 1.20 | - | 87 |
| TPU-Es | PRE-ELEC® TPU 1512 | Flexible Tubes and Profiles, Sheets, Technical Parts | • | | • | ◦ | 10 | 8E+2 | 190°C / 10.0 kg: 11.0 | 1.27 | - | 87 |

• Primary processing method ◦ Secondary processing method

Manufactured and shipped from Finland 2024
(warehoused in our North Carolina plant for JIT requirements, Q4/2024).

Premix's manufacturing plant in the U.S. fully operational during Q2/2025
Compounds manufactured in North Carolina.



More information in
Premix Data Center:
www.premixgroup.com/data-center

Notes

(c) dilution 40% HDPE MFI 9 (190°C / 21.6 kg) (f) dilution 30% PP-C MFI 13 (230°C / 2.16 kg)
(d) dilution 50% HDPE MFI 9 (190°C / 21.6 kg) (g) dilution 50% PP-C MFI 3.5 (230°C / 2.16 kg)
(e) dilution 50% PP-H MFI 35 (230°C / 2.16 kg) (j) 50% PP-C, MFI 3.5 (230°C / 2.16 kg)

Surface resistance - how to read: for example, 2E+6 Ω = 2,000,000 Ω