

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

Notes

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

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