

CONDUCTIVE PRE-ELEC® COMPOUNDS FOR FLEXIBLE INTERMEDIATE BULK CONTAINER (FIBC) APPLICATIONS



Unlike plastics in general, conductive plastics have the ability to conduct electricity. When grounded, conductive plastics remain at ground potential and do not accumulate static electricity. Premix's conductive PRE-ELEC® compounds offer a wide variety of solutions for various Flexible Intermediate Bulk Container (FIBC) applications.

CONDUCTIVE PRE-ELEC® COMPOUNDS FOR FIBC APPLICATIONS

Conductive FIBCs, or FIBC type C bags, are made from conductive threads interwoven with non-conductive fabrics. They can be used to transport flammable powders and in spaces where flammable vapors, gases, or combustible dusts are present. Conductive inner lining increases the safety of these products.

PRE-ELEC® COMPOUNDS MEET THE HIGHEST CUSTOMER REQUIREMENTS

Our portfolio covers materials specially innovated for thin applications. A selection of compounds and concentrates is available for FIBC type C applications (raffia tapes, monofilaments and films).

The material properties of our grades are excellent. We use high quality raw materials, and the compound produced has good dispersion and is easily processable.

Premix has extensive experience in the industry and over 40 years of polymer compounding know-how. We always offer technical customer support and expertise during customer trials, continuing through the whole customer relationship.

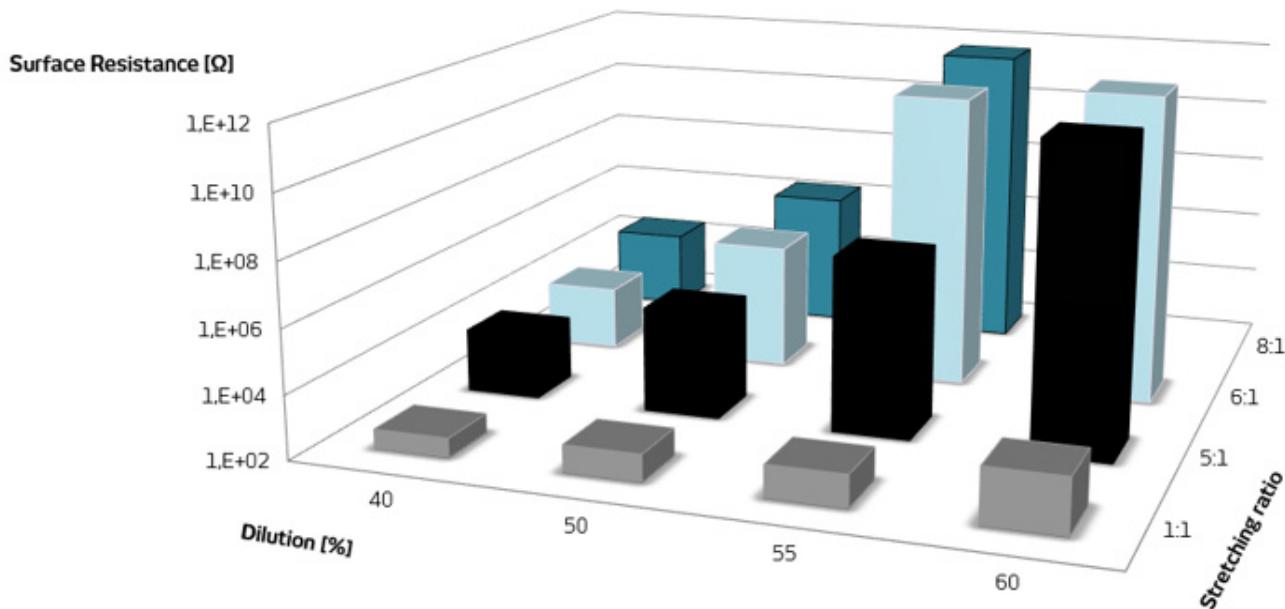


Figure 1 Surface resistance at various dilution levels and stretching ratio | PRE-ELEC® PP 1353

PRE-ELEC® COMPOUNDS FOR CONDUCTIVE LINER FILMS

FIBC liner films can also be made of Premix conductive LDPE & LLDPE compounds and concentrates. The materials are easily processable, e.g., with a high blowing ratio and still retaining the required level of conductivity.

Final properties can be modified by choosing a concentrate instead of direct compound. A lower dilution ratio leads to higher conductivity. A special dilution polymer brings special mechanical properties, such as better flexibility. Using concentrates also brings cost benefits. Film grades are also suitable for multilayer films where surface layers are conductive.

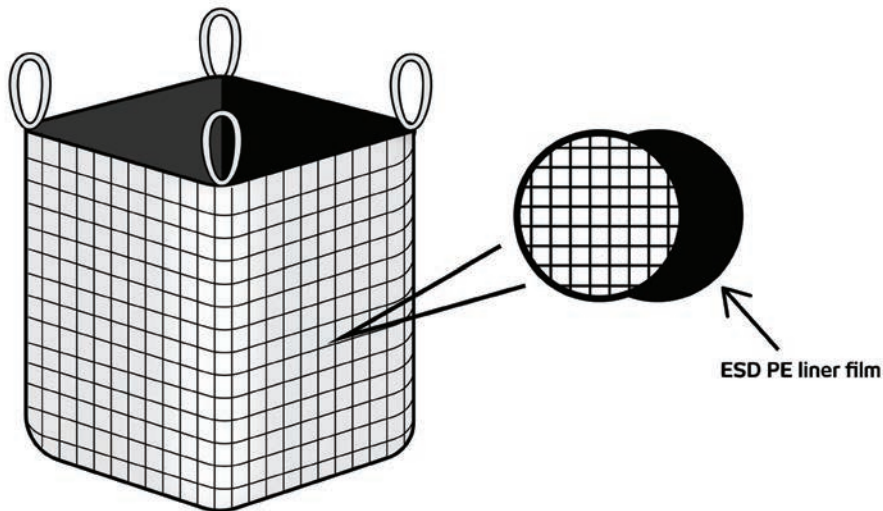


Figure 2 FIBC liner films (the black layer)

PRE-ELEC® COMPOUNDS FOR CONDUCTIVE MONOFILAMENTS AND RAFFIA TAPES

Premix's electrically conductive PRE-ELEC® compounds and concentrates are specially developed for thin and durable monofilaments and raffia tapes in FIBC type C applications. The material maintains an excellent conductivity level. The electrically conductive filaments can be easily braided with non-conductive filaments. This enables conductivity in the end-product.

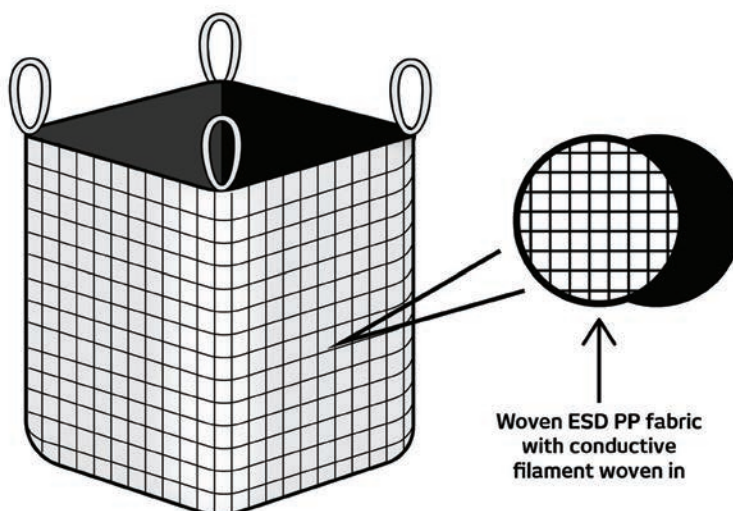


Figure 3 Monofilaments and raffia tapes in FIBC type C applications (black grid on the white layer)

PRE-ELEC® Grade Selection for FIBC solutions:

www.premixgroup.com/data-center

Premix offers conductive material solutions for filaments and the inner liner films in FIBC solutions. The layers are very thin, and this requires a very high quality from raw materials. Premix materials are highly dispersed and easily stretchable which makes the manufacturing of thin products easier.

If you are looking for an electrically conductive plastic compound or concentrate with special features, do not hesitate to contact us at Premix.

ABOUT PREMIX

With more than 40 years of industry experience, Premix's expertise lies in the formulation and production of functional plastic materials. Premix's materials are more than just traditional plastics – they play an active role in the product or process they are integrated into. Premix was one of the first companies to enter the market for electrically conductive plastics in the early stages, and it is now the world's leading specialist in the area. Today, we are a company that develops future solutions also for antimicrobial materials.

PRE-ELEC® is a registered trademark of Premix Oy.

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