



Can Plastic Be Used as Insulation?

People often wonder if plastic can be used as insulation, and the answer is yes! Certain types of plastics, like polyester films, are excellent insulators, which means they can effectively trap heat. Plastics offer a variety of properties that allow them to be used across many different industries, as well as the insulation of electrical wires.

Why Is Plastic Used to Insulate Electrical Wire?

Polyester films are commonly used to insulate electrical wire because of their unique set of characteristics, including:

- **High Dielectric Strength:** Dielectric strength refers to the electrical strength of an insulating material, in this case, polyester films. The thicker the film, the more dielectric strength it has because it can withstand electrical currents at a greater level.
- **Impressive Thermal Endurance:** Polyester film maintains longevity when used to insulate electrical wire because it is tear-resistant, has high mechanical-strength, and is flexible.
- **Superior Electrical Barrier:** Polyester is an excellent electrical barrier and is often used in the wiring of appliances, digital printers, and other equipment that utilizes a motor. The polyester insulation helps prevent the electricity from arcing or shorting out when the motor puts a large draw on the system.

In addition to these characteristics, polyester is also known to maintain chemical stability, is solvent resistant, and remains intact in varying temperatures. Now, if you're curious about which plastics are used for wire insulation, that list is just as impressive.

What Plastic Is Used for Wire Insulation?

The most common and dependable polyester films used for wire insulation are Mylar® and Melinex®, from DuPont Teijin Films and Teonex® from Toyobu Film Solutions Limited™. These films are versatile and consistently deliver when used for different insulating purposes. Tekra is proud to partner with DuPont Teijin Films and Toyobu Film Solutions Limited™ to convert and distribute Mylar®, Melinex®, and Teonex® in varying thicknesses, visual appearances, and treated surfaces to ensure your polyester film is exactly what you need to properly insulate your electrical wires.

For any questions regarding plastics being used to insulate electrical wire or for help selecting the right polyester film for your specific application, please [contact us](#) online or call [\(800\) 448-3572](tel:8004483572).

