



» PRODUCT BULLETIN

Maxxam™ Foamable Formulations for Wire & Cable Applications

Maxxam™ foamable polypropylene (PP) formulations, both solid and cellular, are developed specifically for wire and cable applications. In particular, cellular PP solutions leverage innovative foaming additives to enhance performance, reduce weight, and optimize material usage, making them an excellent choice for modern cable insulation.

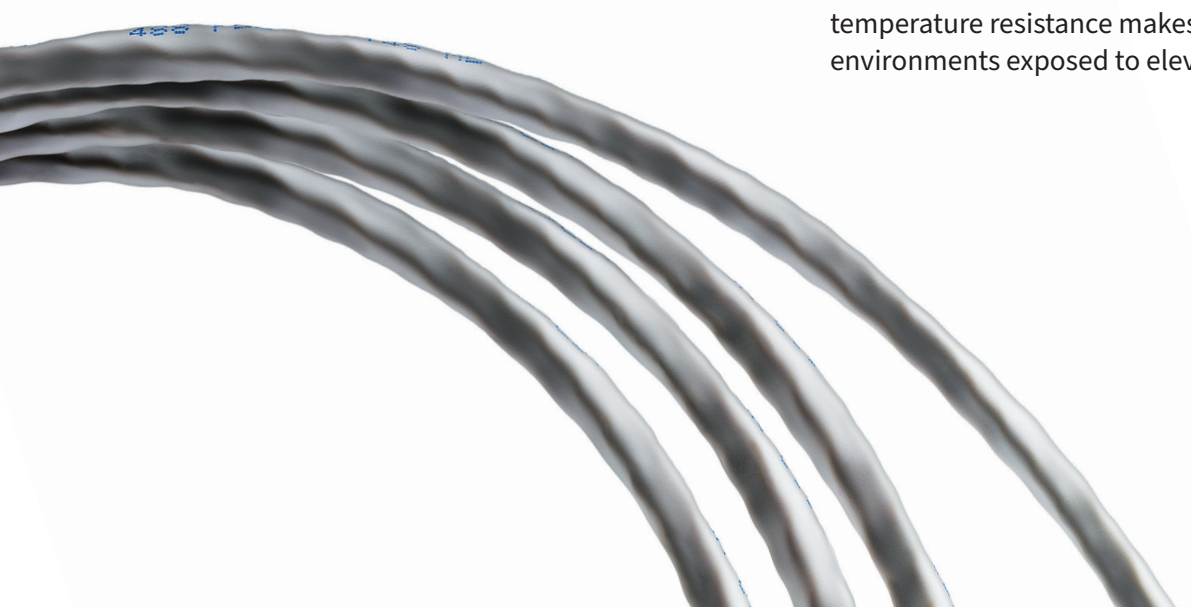
Maxxam foamable formulations for wire and cable applications represent a significant advancement in material technology. With their unique properties and benefits, our PP solutions can meet the evolving demands of the industry, providing manufacturers with the tools they need to innovate and excel.

WHY USE A FOAMING ADDITIVE IN WIRE & CABLE APPLICATIONS?

Foamable PP formulations for wire and cable applications offer enhanced electrical properties, achieving a high-performance insulation that provides reliability across various applications. Additionally, these cellular formulations can be developed without azodicarbonamide, for a production process that advances sustainability. Cellular technology can be combined with a solid formulation in skin-foam-skin or foam-skin design for enhanced properties.

POLYPROPYLENE VS. POLYETHYLENE FOR CABLE INSULATION

Polypropylene offers several advantages over polyethylene for cable insulation, including higher mechanical strength, which helps avoid deformation under stress. Also, its higher temperature resistance makes it suitable for environments exposed to elevated temperatures.



BENEFITS OF THE CHEMICAL FOAMING PROCESS

- **Standard equipment compatibility:** Maxxam formulations can be processed using standard extrusion equipment, eliminating the need for specialized machinery
- **Chemical foaming formulation:** No investment in gas injection systems or procurement of gas is required
- **High foaming rates:** Achieve up to a 60% foaming rate, optimizing material properties while maintaining performance
- **Adapted temperature profile:** These foamable grades are formulated to work effectively within a tailored temperature profile, offering consistent quality

MAXXAM PP COPOLYMERS ARE SPECIALLY FORMULATED TO DELIVER

- **High-temperature performance:** Suitable for applications requiring resistance to elevated temperatures
- **High foaming rate for cellular formulations:** Contributes to better electrical properties due to low density
- **Excellent mechanical properties:** Provides durability and reliability in demanding environments

KEY CHARACTERISTICS OF CELLULAR PP FORMULATIONS

- Fully formulated PP: no need for other additives
- Can be based on chemical foaming agents which are not hazardous substances for a sustainable production process
- No need for gas injection
- Excellent surface finish and uniform cell structure
- Excellent electrical properties to reach stringent capacitance
- Low shrinkage
- Adapted for skin-foam-skin or foam-skin design
- Higher temperature resistance compared to PE
- Good crush resistance

MARKETS & APPLICATIONS IN WIRE & CABLE

- Communication cables such as telecom and data cables
- Twisted wire pairs
- Coaxial cables

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