



» APPLICATION BULLETIN

Foaming Technologies for Communication Cables

Advanced additives for copper or metallic data cable applications

Avient offers versatile high-performance chemical foaming and nucleating agents specifically developed to improve electrical performance of copper or metallic ethernet, coaxial, and specialty communication cables. Our advanced additive formulations deliver a fine, uniform cell structure critical for superior electrical performance.

Available additive forms include masterbatch, liquid concentrates, or compounded solutions.

Product Options

- Cesa™ Nucleant Additives
- Hydrocerol™ Chemical Foaming Agents (solid and powder)
- Excelite™ Chemical Foaming Agents (liquid)
- Maxxam™ Foamable Formulations
- Combination formulations (foaming agent + nucleating agent)

Common Resin Applications

- FEP (fluorinated ethylene propylene)
- PFA (perfluoroalkoxy)
- PE (polyethylene)
- PMP (polymethylpentene)
- PP (polypropylene)

KEY BENEFITS

- **Improved electrical properties** – Enhanced dielectric performance for superior signal transmission via an optimized cell structure
- **Potential lightweighting** – For applications where material reduction would be valued
- **Nitrogen gas assist compatible** – Highly effective in nitrogen gas assist extrusion processes

Avient provides valuable in-person technical support throughout the entire process, from initial testing to full-scale production. An experienced field team works on-site to optimize formulations and processing parameters for any specific application requirements.

1.844.4AVIENT
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