Zavfino's Graphene Dielectric Shielding:

What is Graphene?

Graphene is an allotrope of carbon which, at the molecular level, forms a two dimensional hexagonal lattice in which one atom forms each vertex. It is the basic structural element of various other allotropes, including graphite and charcoal. Raw graphene is a cutting-edge polymer which is both conductive and flexible. It has many unique electrical, mechanical, and chemical properties. This makes it an ideal material for use in audiophile engineering applications.

With an intrinsic tensile strength of 130 GPa and a Young's Modulus stiffness of 1 TPa (aprx. 150,000,000 PSi), graphene is the strongest material ever tested. Its tensile strength is about 200 times greater than that of the strongest known steels. It is also the best conductor of electricity yet known. Studies have proven electron mobility through graphene at values exceeding 15,000 $cm^2 \cdot V^{-1} \cdot s^{-1}$.

What is Zavfino ZGRAPh-LDP™…?

Zavfino is the first audiophile cable OEM to integrate graphene insulation into high-end A/C power cables as a dielectric shield. After more than two years in development with a leading American graphene polymer research company, we're proud to unveil our new proprietary ZGRAPh-LDP™ conductive shielding/dielectric, first used within our Silver Dart™ OCC A/C power cable.

The results of using ZGRAPh-LDP™:

1. Superior protection from electromagnetic interference as the graphene contour moulds to our copper shields and prevents EMI spikes. The end result is improved grounding and vastly superior signal transmission.

2. Graphene has excellent Electrostatic Discharge (ESD) properties that eliminate static electricity and tribo-electric charging; both of which can negatively affect a power cable's performance.

3. Graphene's high heat deflection reinforces the dielectric by 30%. This ensures that all of Zavfino's cables that are shielded with graphene will deliver unchanged performance for decades to come.

4. Graphene creates a 100% anti-corrosive barrier that prevents the ingress of oxygen into the shield and conductors. An air-tight seal and zero corrosion further guarantees consistency of signal transfer at a molecular level and unchanged sonic performance for a lifetime of usage.

Why Zavfino's Graphene outperforms traditional shielding:

Electromagnetic theory stipulates that a signal inside of a closed electromagnetic field cannot be affected by interference from an outside source.

Traditional dielectric insulation that uses braided Copper (Cu) or Mylar shields cannot ensure a perfectly closed field. Copper braids and Mylar wraps both have gaps between their overlaid bundles and layers which inherently occur during manufacturing. Low frequency interference and high frequency noise will slip through these gaps and cause electromagnetic contamination and sonic degradation.

Zavfino's primary goal is to keep any and all EM interference away from the signal's transmission path. By utilizing our extrudable graphene polymer jacket over the shield, our new ZGRAPh-LDP™ cover solves a myriad of electrical problems which braided shielding innately causes.

Our graphene dielectric ensures 100% coverage as it moulds itself to the traditional shield and drain of the cable. In effect, this creates a perfectly closed electromagnetic field.

Zavfino's Graphene Dielectric Shielding:

When traditional shields are hit by strong EM interference, conventional braided shielding merely minimizes it. As such, an inductive current is created that has to be grounded through the drain wires. Since this current cannot immediately leave the shield, it generates noise.

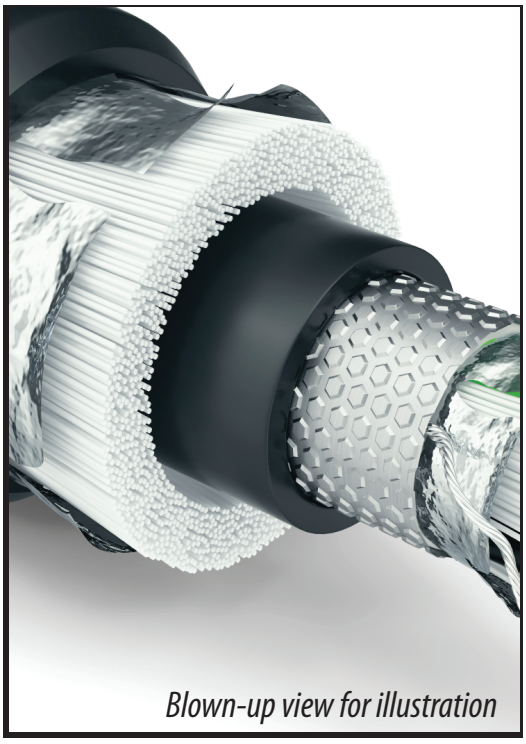
Zavfino's ZGRAPh-LDP™ shielding/dielectric also has an exceedingly low conductive resistance. Our graphene resin is not a continuous conductor like copper, so it reduces electrical Eddy currents and the possibility of any secondary electromagnetic interference.

A further benefit of our graphene shielding is that, at the molecular level, it isn't a symmetric structure like copper wire. Asymmetrical graphene particles change the direction of electrical Eddy currents and force the currents to counteract each other. The overall current flow in our graphene insulation is, therefore, much smaller than if it was moving through a copper shield. Graphene thus eliminates residual noise at a far higher rate.

Unlike copper or Mylar, our ZGRAPh-LDP™ material absorbs electromagnetic noise and transfers it into heat. As this energy transfer occurs, zero inductive current is produced. In the aggregate, the total inductive current within the cable shield is minimized and the noise level is drastically reduced.

And what does all of this science and technology mean to audiophiles?
The space age materials, superlative design, and cutting-edge manufacturing processes used to create Zavfino's OCC Silver Dart™ have resulted in a power cord that has whisper quiet backgrounds, astonishing low-level detail retrieval, superior PRaT, and remarkable timbral accuracy. This power cable produces phenomenally lifelike textures and timbres from instruments across the entire frequency spectrum.

Overall, Zavfino's OCC Silver Dart™ will bring audiophiles a vastly improved listening experience that conveys the essence of music with astounding sonic purity and musical honesty.



Blown-up view for illustration