

Silver coated Polystyrene Particles

Description

Silver-coated Polystyrene Particles are a versatile core-shell composite material consisting of a lightweight polystyrene core encapsulated by a functional silver nanolayer. This unique structure combines high electrical conductivity and broad-spectrum antimicrobial activity, enabling multifunctional applications. The silver coating provides exceptional conductivity, enhancing the performance of polymer-based composites in flexible electronics, conductive adhesives, and antistatic coatings. Simultaneously, the inherent antimicrobial properties of silver make these particles ideal for medical device coatings, antibacterial food packaging, and antimicrobial surface treatments in public spaces, effectively suppressing bacterial and fungal growth. Furthermore, their surface plasmon resonance properties significantly improve optical sensing capabilities, facilitating ultrasensitive detection of biomolecules and trace environmental contaminants. With tunable particle sizes (1-100 μ m) and customizable surface characteristics, these materials demonstrate remarkable adaptability across biomedical research, advanced electronics, and environmental monitoring systems.

Abvigen Inc can provide high-quality variants featuring uniform particle distribution, reliable conductivity, and durable antimicrobial performance to meet diverse industrial and research requirements.

For custom sizes, formulations or bulk quantities please contact our customer service department. Website: <u>www.abvigen.com</u> Phone: +1 929-202-3014 Email: <u>info@abvigenus.com</u>



Characteristics

Size: 100 mg Surface: Plain Shape: Powder Composition: Silver coated Polystyrene Particles Standard deviation: CV<5% Store: Storage at 2 - 8 °C

Storage

This product should be stored at 4°C. DO NOT FREEZE.

Advantage

- Uniform particle size
- Surface modifiable

Good conductivity

Antibacterial performance

Applications

Flexible electronic devices Food packaging materials Biomedical science Environmental monitoring

Ordering Information

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