

ANTISTATS

POLYOLEFINS

APPLICATIONS

Consumer packaging bottles, caps, closures and many other packaging types where a build-up of static can have detrimental effects on processing, functionality, shelf appeal and safety.

ADVANTAGES

Enhanced Processing

Our antistat products are engineered to provide smooth and efficient processing solutions across a wide range of molding operations. By reducing static buildup during processing and handling, they minimize static cling that causes parts to stick to the mold which can lead to major process disruptions, material scrap, and quality issues. Reducing dust attraction and improving material flow helps converters achieve higher throughput, fewer disruptions, and cleaner die surfaces.

Shelf Appeal

On the shelf, our antistats deliver a blemish free final article by eliminating processing related defects and keep the final article free of dust and debris accumulation, preserving package aesthetics. Whether in retail displays or clear packaging formats, our solutions ensure products maintain a premium appearance that aligns with brand expectations. Surface resistivity performance, commensurate with humidity levels, maintains visual cleanliness over the product's shelf life without affecting transparency or gloss.

Safety

Critically, our antistats improve operational and end-use safety by eliminating the accumulation of electrostatic charge that can lead to sparks, fires, or explosions—especially during high-speed packaging, conveying, or filling operations involving powders, films, or dry bulk materials. We offer amine-free, non-migrating, low-humidity and permanent antistat products that meet FDA, EU food contact, and REACH safety standards, making them ideal for both regulated and general-purpose applications. With our portfolio, you can reduce risk, enhance quality, and protect your brand at every stage of the packaging life cycle.



TECHNICAL DATA

Our Antistat portfolio for polyolefin-based consumer packaging is designed to support both injection molding and extrusion blow molding applications with flexible solutions tailored to various performance needs. It includes options suitable for both standard and low-humidity environments, offering reliable static control for manufacturing, handling, and end-use. The portfolio features FDA-compliant and amine-free selections ideal for food, personal care, and household packaging, as well as migrating and non-migrating technologies to balance immediate effectiveness with long-term durability. Whether the goal is to reduce dust attraction, improve line efficiency, or meet stringent regulatory requirements, our portfolio delivers dependable antistatic performance without compromising processing or recyclability. Consultation with Penn Color regarding your unique application and specific requirements ensures that the recommended product and dosage levels align with your desired outcomes.

Figure 1: Dust Pick Up Performance

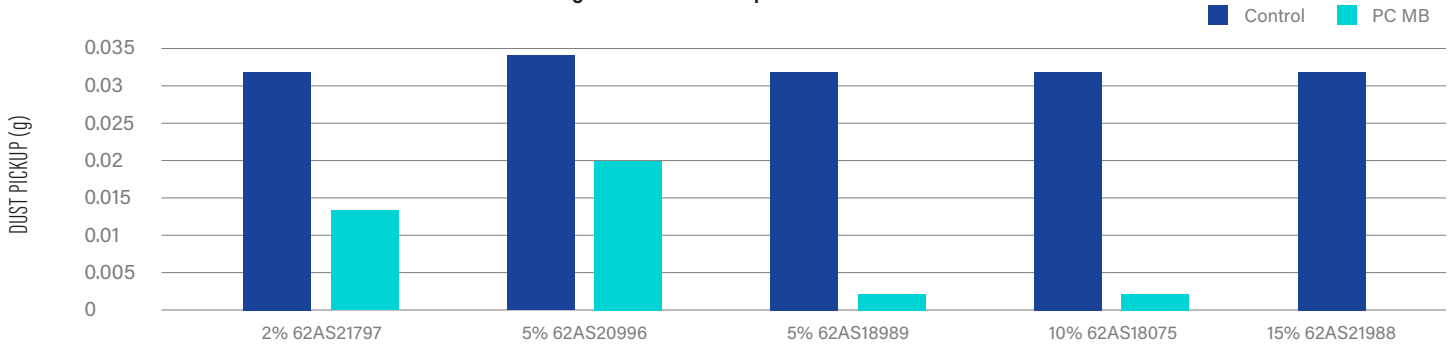
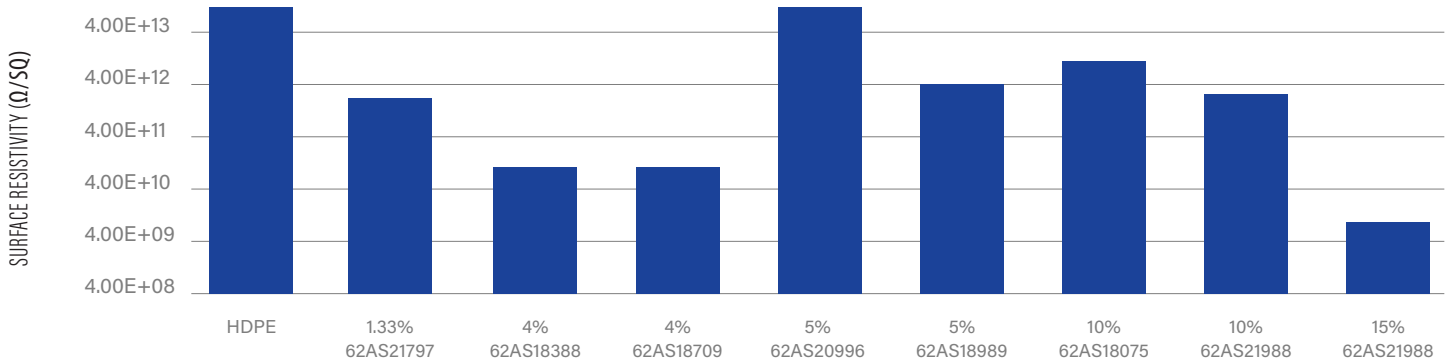
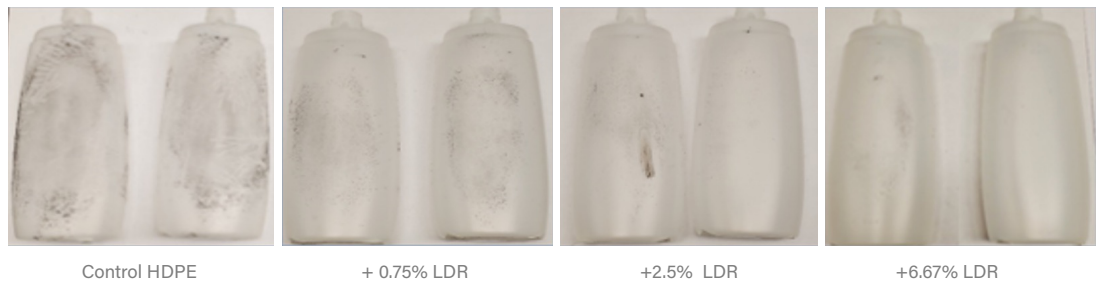


Figure 2: Surface Resistivity Performance



*Bottles aged for 30 days at room temperature then 24 hours at 50% relative humidity.



IMPORTANT INFORMATION

LDR recommendation is intended for guidance only and may need to be adjusted based on performance, processing method and regulatory requirements. Detailed compliance documentation can be provided by Penn Color's Product Stewardship Department upon request. However, be advised it is the responsibility of the user to assess its product uses and applications and assure compliance to all applicable laws and regulations, including FDA 21 CFR and EU food contact status. Regional coding suffixes may apply.

