

ANTI-SCRATCH



Polyolefin bottles undergo an extended and potentially rough journey, starting from the bottle-blowing phase until the moment a consumer selects it from the shelf. Throughout this journey, bottles may accumulate scratches and imperfections that can adversely affect the package's shelf appeal. Incorporating an Anti-Scratch additive in the extrusion blow molding process serves as a protective measure, guarding the bottle against such imperfections. This ensures that the bottle presented on the shelf accurately reflects the intended brand image.



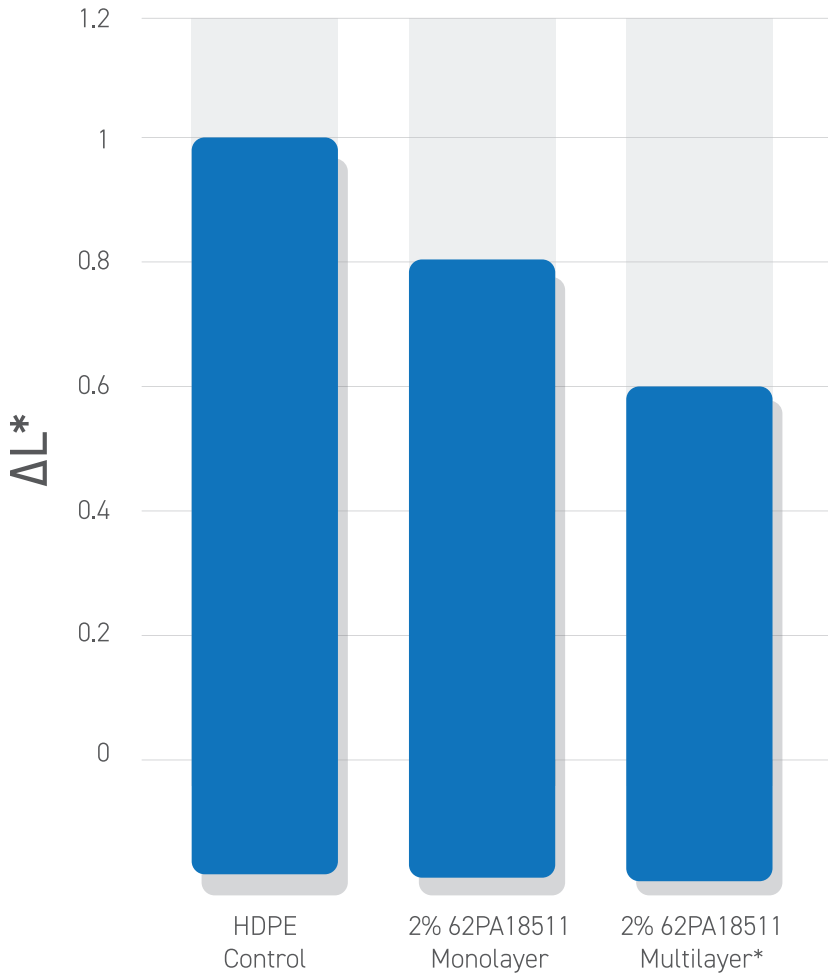
62PA18511 is an effective Anti-Scratch additive. This product elevates the surface properties of polyolefin bottles by creating a protective layer that effectively resists scratches and abrasions. The product establishes a defensive barrier by forming a thin coating on the surface, safeguarding the material from external factors that may cause scratches or minor damages.

The inclusion of our Anti-Scratch additive raises the difficulty level for abrasive materials to create scratches on polyolefin packaging, achieving this by reducing surface friction. This feature proves especially advantageous in scenarios where bottles may encounter contact with each other or other surfaces.

Designed for optimal performance in polyethylene extrusion blow-molded bottles, this product is tailored to enhance the durability of such applications. Consulting with Penn Color regarding your unique application and specific requirements ensures that the recommended dosage aligns seamlessly with your desired outcomes.

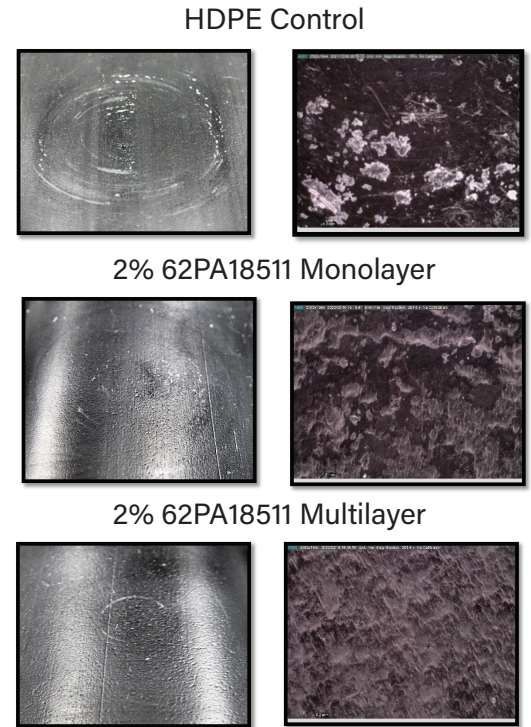
SCRATCH RESISTANCE IN MONO & MULTILAYER

Figure 1: ΔL^* for black, 30mil bottles after 300 strokes with a crockmeter



*62PA18511 was added to the outer layer of a 20/80 structure.

Figure 2: Microscopy images of black bottles after 300 strokes with a crockmeter



IMPORTANT INFORMATION

ISO 9001 Certified

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.