

Milliken®
ClearShield®
 Crystal-Clear UV Protection

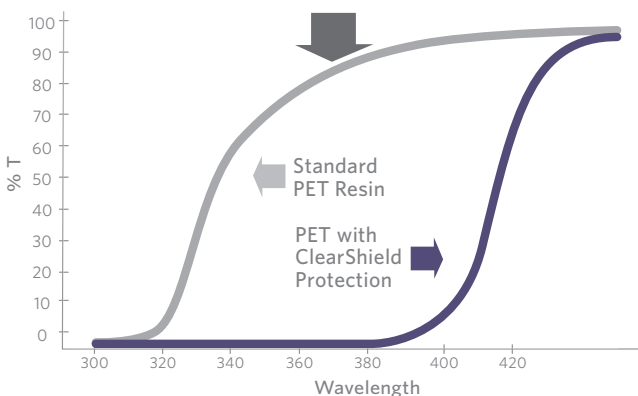


Clearshield® Colorless UV Absorbers give the ultimate protection from damaging UV light to PET packaged materials such as food, beverages and consumer products. This technology creates a new UV protection performance standard, extending the shelf life of packaged materials, protecting brand image and allowing more friendly formulations with natural colorants, flavors, and essences. Clearshield also overcomes the deficiencies of traditional technologies including unwanted color, migration, bloom and plate-out. Clearshield is available as an easy feeding homogenous liquid or in commercially available resins and is compliant for food contact applications.

Attributes

- Protection from damaging UV light
- Protecting more natural ingredients
- Extended shelf life of packaged contents
- Protecting brand image
- No extraction into formulation
- Resists plate out

The added protection of ClearShield 5% transmission at 390nm.



Case Studies

Brand Identity Commercial Shampoo

Formulation: Exposed to 45 accelerated QUV hours, the Clearshield protected bottle retained "signature" color, lost in bottle on the right.



Product Integrity Riboflavin (Vitamin B2 5.5mg/l)

Formulation: The ClearShield protected bottle on the left was exposed to 19 accelerated QUV hours, and showed a 400% increase in shelf life versus the unprotected bottle on the right.



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