



» PRODUCT BULLETIN

ColorMatrix™ Lactra™ LX Light Blocking Additive for PET

A bright white, light blocking technology for UHT dairy packaging

ColorMatrix™ Lactra™ LX Light Blocking Additive provides high-performance light blocking technology and protection for liquid dairy products in monolayer polyethylene (PET) bottles. It is a bright white, solid masterbatch additive that protects contents from visible light and extends shelf life. Available primarily in North America, the Lactra LX technology is especially effective in ultra-high temperature (UHT) liquid dairy products which have a longer shelf life and need greater protection due to ambient storage conditions.

KEY CHARACTERISTICS

- 100% visible light blocking for monolayer PET containers
- Enables versatile container designs and shapes for ease of pouring and product differentiation
- Suitable for re-sealable containers or containers that are stored flat after opening
- Offers package lightweighting with no reduction in light blocking performance
- Lowers system cost compared to other rigid packaging





WHY LIGHT BLOCKING?

Light-induced oxidation causes degradation reactions in dairy products and a decrease in nutritional quality. Vitamins A, B2 (riboflavin), D, and amino acids are lost, lipids (milk fats) oxidize, and off-flavors can develop.

Traditionally, UHT liquid dairy products have been packaged in laminated paperboard cartons, pouches, or multilayer high-density polyethylene (HDPE) and PET bottles. These packaging options can have several disadvantages due to their shape and material, making them non-user friendly in handling, storage, opening, pouring, and resealing. Both paperboard and multilayer polymers restrict design freedom, so the final packaging is often less than ergonomic.

To increase the user-friendly aspects of UHT dairy packaging, ColorMatrix Lactra LX Light Blocking Additive expands design freedom by allowing designers to use a single PET layer bottle to create the same visible light blocking as paperboard and multilayer HDPE and PET packaging. As a result, light-induced oxidation is minimized and properties and taste are preserved, even at the lengthy ambient shelf life common with UHT liquid dairy products.

MARKETS AND APPLICATIONS

Dairy packaging, including UHT liquid dairy products

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