

# Milliken® UltraGuard™ Solutions

For improved barrier properties  
in flexible food packaging

Polyethylene food packaging with UltraGuard™ Solutions provides controlled crystallization allowing for enhanced properties.

UltraGuard™ Solutions by Milliken is a line of performance additives that brings value to polyethylene films by improving barrier properties. UltraGuard Solutions increases the barrier against most permeants by up to 60% in HDPE with little to no impact on processing and mechanical properties, bringing value to both converters and brand owners.

With the increasing demand for recyclability in plastic packaging, the industry faces the challenge of having to de-prioritize commonly used materials that affect recyclability (such as metallized film). That changes the balance of properties and requires converters to find alternatives to meet the packaging technical requirements. UltraGuard Solutions is a very useful item to have in your toolbox.

UltraGuard Solutions can also be used to bring higher barrier levels to certain flexible packages, providing more protection to the food and potential shelf life extension.



## UltraGuard realigns the PE crystalline structure to create a torturous path



- Enables more recyclable packaging
- Enhanced food protection and shelf life
- More flexibility of design of film structures

Please contact your Milliken representative for further product information including chemical registrations, food contact status, and other regulatory details.

PLEASE NOTE: As each customer's use of our product may be different, information we provide, including without limitation, recommendations, test results, samples, care/labeling/processing instructions or marketing advice, is provided in good faith but without warranty and without accepting any responsibility/liability. Each customer must test and be responsible for its own specific use, further processing, labeling, marketing, etc. All sales are exclusively subject to our standard terms of sale posted at [www.milliken.com/terms](http://www.milliken.com/terms) (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

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