

# Milliken® Hyperform® HPN® 909ei

## High-Performance Additive for Polypropylene

Designed for use by thermoformers in polypropylene homopolymers, Hyperform HPN 909ei is an additive that offers improved aesthetics and has been developed using a cleaner chemistry.

In addition to providing an excellent balance of physical properties (high stiffness while maintaining good impact strength), isotropic shrinkage, and a higher heat deflection temperature (HDT), this additive yields products with improved optical properties, including lower haze, reduced yellowing, and an overall cleaner look. This enhances the ability of end users to substitute highly recyclable polypropylene for other materials in some of their applications.

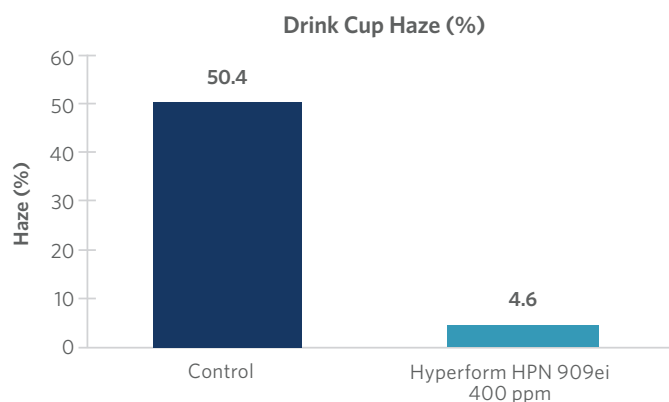
### Improved Aesthetics

Hyperform HPN 909ei reduces the haze and the yellowness index, yielding final parts that are cleaner, clearer and more transparent, which can further enhance sustainability by allowing for more inter-material replacement.



### Applications

- Food Packaging
- Drink Cups / Lids
- Trays



### Cleaner Chemistry

Another factor, which is vitally important in the European Union, is that this new formulation is tailored specifically to address concerns related to migration, especially in food-contact applications. Hyperform HPN 909ei not only is derived from cleaner chemistry, but it also has one SML (Specific Migration Limit) less than Milliken's previous generation product for thermoforming, Hyperform HPN 600ei.



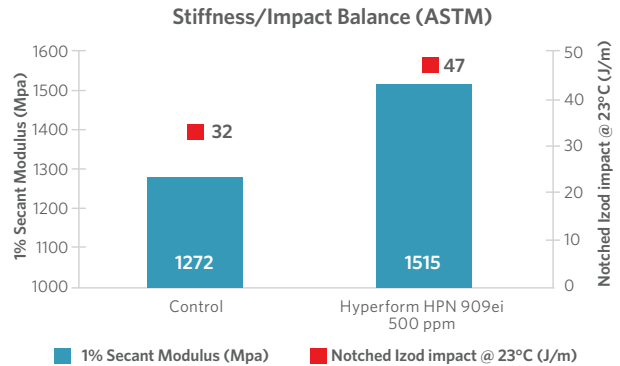
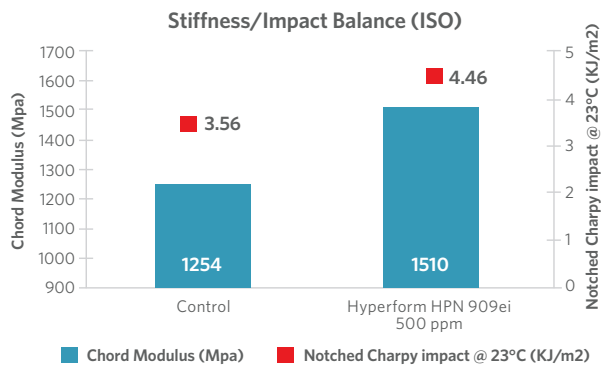
# Hyperform® HPN® 909ei

## High-Performance Additive for PP



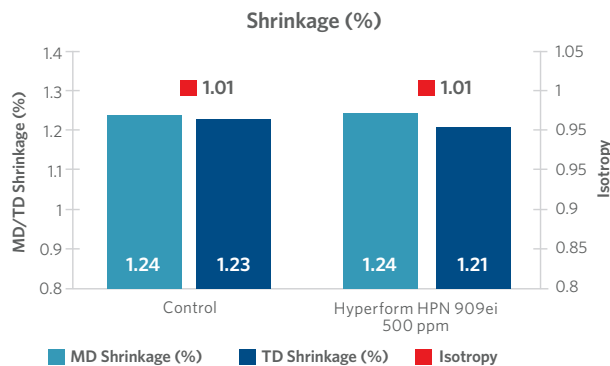
### Balanced Physical Properties

Traditional nucleating agents require customers to sacrifice impact to gain greater stiffness. Hyperform HPN 909ei delivers improved stiffness (Flexural Modulus) while maintaining the impact performance.



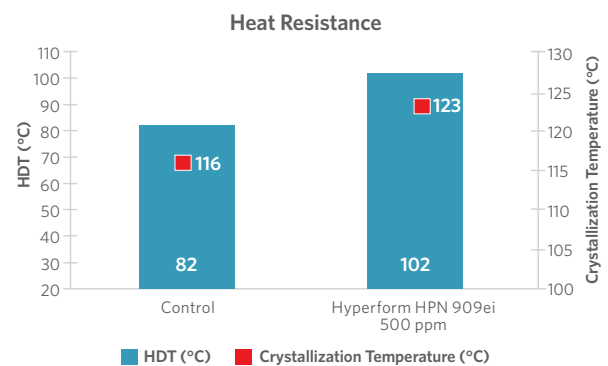
### Isotropic Shrinkage

The unique isotropic shrinkage behavior of Hyperform HPN 909ei allows dimensionally stable, non-warping PP parts.



### Heat Resistance and Crystallization Behavior

HPN 909ei provides a higher heat deflection temperature (HDT) and an increase in crystallization temperature.



Please contact your Milliken representative for any additional information.

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.

**NORTH AMERICA**  
Spartanburg, SC, USA  
Tel: 800-910-5592  
Fax: 864-503-2430  
[millichem@milliken.com](mailto:millichem@milliken.com)

**EUROPE**  
Gent, Belgium  
Tel: 32-9-265-1100  
Fax: 32-9-265-1195  
[eurochem@milliken.com](mailto:eurochem@milliken.com)

**LATIN AMERICA**  
Sao Paulo, Brazil  
Tel: 55-11-3043-7942  
Fax: 55-11-3043-7096  
[lachem@milliken.com](mailto:lachem@milliken.com)

**LATIN AMERICA**  
Mexico City, Mexico  
Tel: 52-55-3088 3600  
Fax: 52-55-9000 2643  
[lachem@milliken.com](mailto:lachem@milliken.com)

**ASIA**  
Singapore  
Tel: 65-6377-0770  
Fax: 65-6377-0990  
[asiachem@milliken.com](mailto:asiachem@milliken.com)

**ASIA**  
Shanghai  
Tel: 86-21 6145-5555  
Fax: 86-21 6145-5558  
[asiachem@milliken.com](mailto:asiachem@milliken.com)

**ASIA**  
Pune, India  
Tel: 91.20.6730.7501  
Fax: 91.20.6730.7514  
[asiachem@milliken.com](mailto:asiachem@milliken.com)