

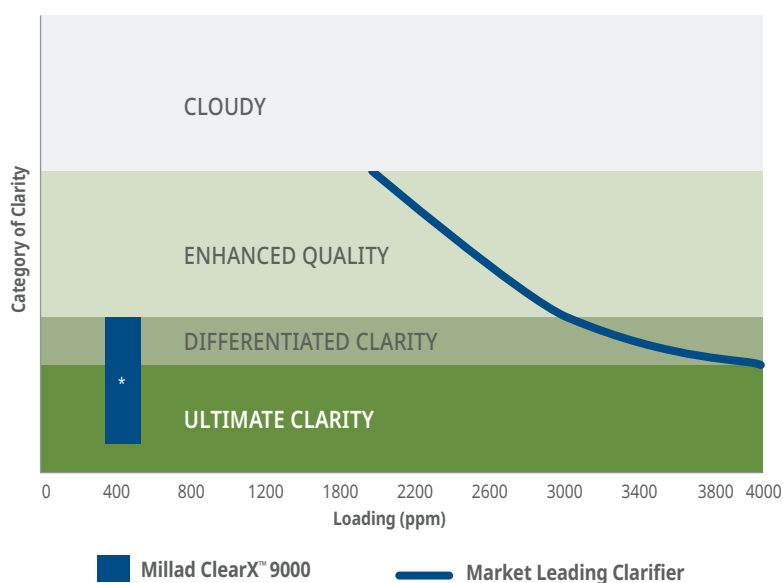
Milliken® Millad ClearX™ 9000

The Clear Choice for Polypropylene

The Next Generation Clarifying Technology from Milliken

Millad ClearX™ 9000, innovative clarifying technology was developed to increase the value and aesthetic of transparent polypropylene using fewer additives by volume.

Ultra-clear transparency at reduced loading levels



* Performance will extend between differentiated clarity or ultimate clarity performance depending on part thickness.



Lower loading levels means:

- Less clarifying additives used in the product, decreasing material handling needs during polymer production.
- Less clarifying additives transported per product, resulting in lower freight costs and fewer greenhouse gas (GHG) emissions during transportation.
- Less warehousing space required for clarifying additives.

Millad ClearX™ 9000 optimizes the transparency of PP now at lower loading levels. Resin producers no longer need 3000 – 4000 ppm to achieve ultra clarity.

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Improve operational efficiency

Millad ClearX™ 9000 has better additive compatibility, which supports operational efficiency, than the previous generation Millad® NX® 8000.

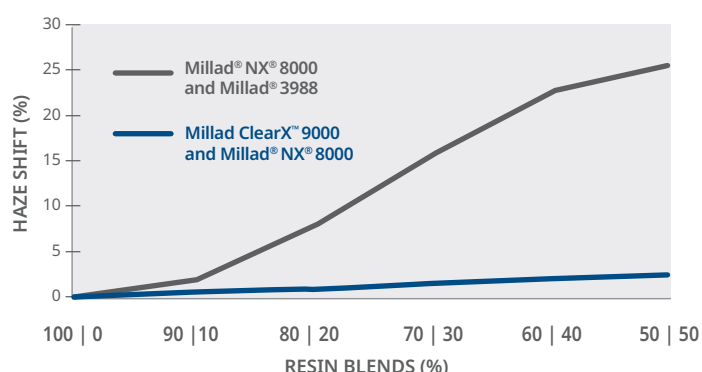
With enhanced operational efficiencies, resin producers and converters can see:

Less downtime | Less waste material | Quicker changeovers

Reduce extraction and migration rates, critical for food-contact and medical applications

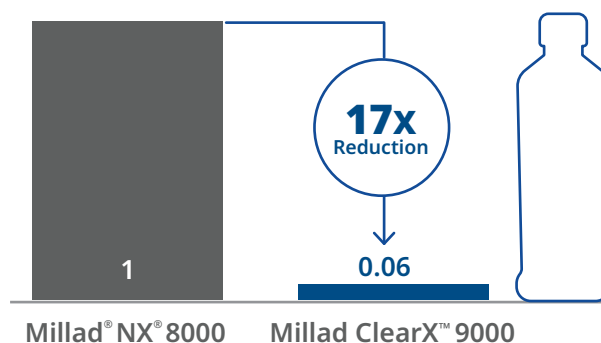
Using Millad ClearX™ 9000 can help future proof your products with tightening additive migration specifications on the regulatory horizon. Millad ClearX™ 9000 lowers the total amount of additives necessary to achieve ultra-clear transparency, reducing the overall additive threshold subject to potential extraction and migration.

Compatibility impact on haze performance



Polypropylene haze performance is more adversely affected when Millad® NX® 8000 and Millad® 3988 are blended than when Millad ClearX™ 9000 is blended with Millad® NX® 8000.

Total Migration in Olive Oil



According to FDA-2020-D-1925. Data normalized to the NX 8000 value.

Eliminate segregated PCR and virgin resin streams

Milliken pioneered the use of clarifying agents in post-consumer recycled (PCR) resin, and now Millad ClearX™ 9000 offers greater flexibility in achieving optimal PCR resin content mixes. Millad ClearX™ 9000 offers improved compatibility with other Millad® clarifying agents, allowing resin producers greater flexibility in formulation and composition.



Contact us for more information
chemical.milliken.com/contactus

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 (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.