

Milliken® Millad® NX® 8000

The New Standard in Clear Polypropylene

Millad® NX® 8000 not only transforms polypropylene into a lightweight, crystal-clear alternative to glass, but also boosts its sustainability by enabling converters to process the material at a lower temperature, resulting in both faster cycle times and energy savings.

Increased Productivity and Energy Savings



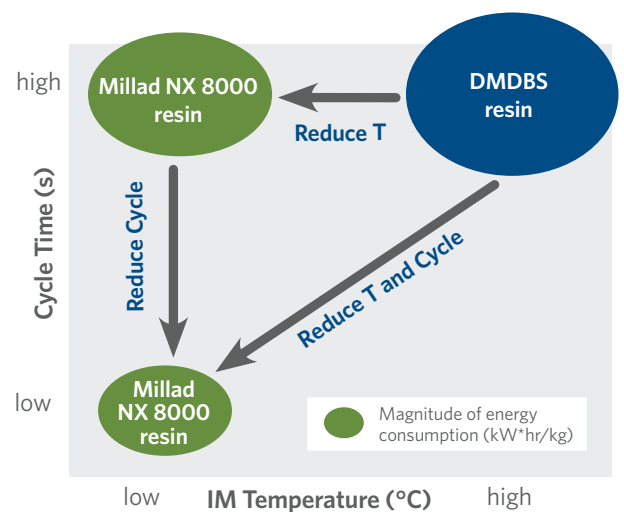
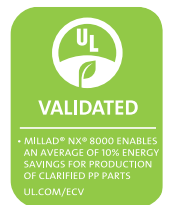
Polypropylene (PP) clarified with Millad® NX® 8000 is revolutionizing the industry by creating new opportunities for crystal clear packaging and products never before seen. Transparency is no longer limited to thin or highly oriented parts, allowing even thicker parts to approach the look of clear materials like glass or amorphous polymers.

Also, PP based on traditional clarifiers (DMDBS) requires high processing temperatures to optimise transparency/clarity. The better solubility of Millad NX 8000 provides improved aesthetics at significantly lower temperatures than traditional clarifiers.

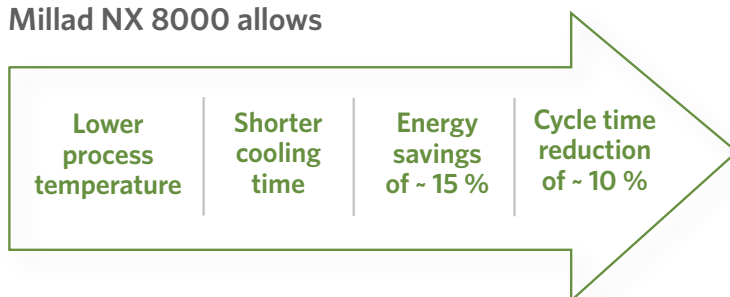
Numerous industrial test data indicates that use of PP clarified with Millad NX 8000 can lower required processing temperatures from 235°C to 190°C, resulting in energy savings between 8 and 12% and associated CO₂ emissions reductions.

Lower temperatures mean lower energy consumption and shorter cooling time, hence improved productivity. The overall concept results in a more sustainable solution.

The lower injection temperatures of PP clarified with Millad NX 8000 promote more energy-efficient operations, which have been validated by the independent organization UL Environment, a business unit of UL (Underwriters Laboratories).



Polypropylene clarified with Millad NX 8000 allows



Traditional Clarifier

Millad NX 8000

Millad[®] NX[®] 8000 clarified polypropylene

Increased productivity and energy savings



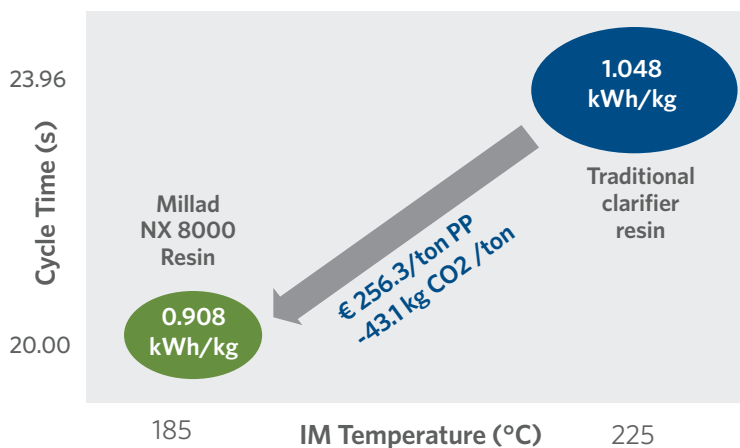
Part	Houseware
Machine	Hydraulic
Shot Weight	137 g/part ; 1 cavity mould
Traditional Clarifier Resin	85 MFR RCP
Millad NX 8000 EQ Resin	85 MFR RCP

Parameter	Assumptions
Energy Cost	€ 0.11/kWh
Machine Cost	€ 25/hour
Labour Cost	€ 5/hour (1 person per 4 machines)
Sustainability	0.308 kg CO ₂ /kWh

Millad NX 8000 clarifier allows PP to be processed at significantly lower temperatures of 190°C to 200°C, a reduction of up to 40°C vs. traditional clarifiers with similar or even better opticals. These cooler temperatures reduce energy demands and associated carbon dioxide (CO₂) emissions, enabling more sustainable packaging solutions.

SAVINGS /1000MT PP EXPRESSED AS

- 17%** cycle time
- 8029** hours saved in manufacturing
- 256300** €
- 13.4%** CO₂ emissions
- 8.45** cars running per year
- 5.38** domestic power [houses] per year
- 9.19** acres of forest



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

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