

# Milliken® Millad® NX® 8000E

Clarifier for extrusion blow molded grades of polypropylene

## TECHNICAL DATA

With the introduction of Millad® NX® 8000E, transparency in extrusion blow molding is no longer limited to PVC or PET. Millad NX 8000E has been designed specifically to provide a step change in optical properties with standard Ziegler-Natta PP EBM resins. Millad NX 8000E enables the substitution of more expensive, less functional, or difficult to process materials.

### Features and Benefits

#### Substantially better bottle aesthetics

- Clarity and gloss
- Fresher look
- Low yellowness index

#### Less dependent on processing conditions

- Mold surface finish
- Processing temperature

#### Tunable aesthetics

### Typical Properties

PROPERTY	TYPICAL VALUE
Appearance	Pale Violet Powder
Millad NX 8000E Purity	97.5 Wt% Min
Millad NX 8000E APHA Color	150 Pt/Co Units Max
Water	1.00 Wt% Max
97 Percentile Particle Size	30 Microns Max
Mean Particle Size	15 Microns Max
Packed Bulk Density	0.30 - 0.34 g/cm <sup>3</sup>
Dissolution Range	210-220°C (in a compounding step)

### Clarifier Summary

Loading range	1800 - 2200 ppm
Bottle Haze (210°C)	18%
Inside Gloss Angle 60°	100 - 110
Outside Gloss Angle 60°	90 - 105
Pellet Color (YI)	-3 to 1
Crystallization temp (Tc)	~ 1°C increase
Plate-out	reduced
Processing window	190-230°C

Relative values compared to conventional clarifier. Actual results may depend on resin, processing conditions and bottle design.

### Packaging

#### 10 Kg Bags (500 kg per pallet)

- Tyvek® Bags
- Pallet Dimensions - 40" x 48" x 60"  
(101.6 cm x 121.9 cm x 152.4 cm)



Traditional Clarifier

Millad NX 8000E



# Millad<sup>®</sup> NX<sup>®</sup> 8000E

Clarifier for extrusion blow molded grades of polypropylene

Cost efficient, balanced properties combined with outstanding optical performance.

## Clarifier Summary

<b>Millad NX 8000E</b>	Significant improvement in clarity/gloss, reduced yellowness with Millad NX 8000E at "standard" (1800-2200 ppm) loading.
<b>Haze Data</b>	35 - 39 mil (0.9 - 1.0 mm) side wall panels from EBM bottles, 2MFR RCP at listed loadings and standard additive package. Bottles made on glass bead blasted mold finish.
<b>Gloss</b>	Measurement of surface smoothness of extrusion blow molded part. Gloss was measured using a Gardner micro-TRI-gloss according to ASTM D523 at an angle of 60°. Bottles made on glass bead blasted mold finish.
<b>Pellet Color (YI)</b>	Pellet color measured in a 50 mm reflective cell with a white background attached to a spectrophotometer in accordance with ASTM E313.
<b>Plate Out</b>	Improved plate-out performance has been demonstrated in EBM, due to increased solubility of Millad NX 8000E and higher "affinity" for PP.
<b>Processing Window</b>	Trials have demonstrated that Millad NX 8000E displays consistent optical performance with broad variation in extrusion and processing temperatures and speeds.

**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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