

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 ³
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[®] NX[®] 8000E

Clarifier for extrusion blow molded grades of polypropylene

Cost efficient, balanced properties combined with outstanding optical performance.

Clarifier Summary

Millad NX 8000E	Significant improvement in clarity/gloss, reduced yellowness with Millad NX 8000E at "standard" (1800-2200 ppm) loading.
Haze Data	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.
Gloss	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.
Pellet Color (YI)	Pellet color measured in a 50 mm reflective cell with a white background attached to a spectrophotometer in accordance with ASTM E313.
Plate Out	Improved plate-out performance has been demonstrated in EBM, due to increased solubility of Millad NX 8000E and higher "affinity" for PP.
Processing Window	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 (all additional/different terms are rejected) unless explicitly agreed otherwise in a signed writing.

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