

## Colloidal Performance Materials

### NYACOL<sup>®</sup> SN902-MB PET Clear Fast Reheat Additive

NYACOL SN902-MB is a masterbatch dispersion of NYACOL's clear fast reheat agent, in 0.80 IV PET resin. The product is supplied at 0.5–1.0% active concentration and the typical letdown ratio is 100 to 200:1 depending on active content. The active ingredient is a 50 to 100 nanometer inorganic IR absorber developed by NYACOL.

The product is intended to be used in the production of PET bottles. PET bottles prepared with SN902-MB at the 100:1 letdown ratio from 0.5% SN902-MB show no change in color, haze or IV compared to virgin resin, but demonstrate improved heating of the preforms, a reduction in energy costs and an increase in production rates.

#### TYPICAL PROPERTIES

Active Content, %:	0.5 – 1.0
Form:	PET Pellets
Appearance:	Light Blue-Green



The unique performance of SN902-MB enables the PET bottle producer to manufacture unique designs, thick or thin wall designs with better heating, and aesthetically pleasing containers.

NYACOL SN902-MB is FDA approved up to 500 ppm active concentration.

#### HOW TO USE

SN902-MB should be blended with the base PET resin and dried to 50 ppm or less moisture to avoid loss of IV. The preforms should age a minimum of 24 hours before blow molding. In blow molding, the preforms will heat up 5–8°C, higher than the virgin resin. The machine power can be reduced or the throughput can be increased. The increase in preform temperature will be proportional to the amount of SN902-MB added.

TYPICAL PREFORM AND BOTTLE PROPERTIES



	Control	SN902-MB		Control	SN902-MB
<b>Preform Color</b>			<b>Bottle Color</b>		
L*	78.19	78.84	L*	95.34	95.34
a*	-0.40	-0.43	a*	-0.03	-0.03
b*	1.16	1.31	b*	0.52	0.51
% Haze	6.55	7.21	% Haze	0.45	0.55
IV	0.79	0.80	IV	N/A	N/A

TO ORDER MATERIAL OR FOR INFORMATION

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