

Eastman AQ™ 48 ultra polymer formulating tips

for clear 55% VOC¹ hair spray

Dispersing

- Eastman AQ™ 48 dispersion at elevated temperature:
 - Disperse in water at 40° to 50°C at a maximum concentration of about 30 wt %. Disperse with rapid stirring to prevent pellets from sticking together. The time to disperse is about 10 to 15 minutes depending on the concentration of Eastman AQ™ 48.
 - Minimize the length of time that the aqueous dispersion is held at elevated temperature.
 - If using an Eastman AQ™ 48 aqueous concentrate over several days, store the concentrate in the refrigerator.
- Eastman AQ™ 48 dispersion at room temperature:
 - Disperse in 2:1 to 1:1 water:alcohol mixture at room temperature at a maximum concentration of about 10 wt %. Disperse with rapid stirring to prevent pellets from sticking together. The time to disperse is about 25 to 30 minutes in 2:1 water:alcohol and about 35 to 40 minutes in 1:1 water:alcohol.

Concentration

- Use 5% or less Eastman AQ™ 48 in the hair spray formula. In a pump hair spray with 5% Eastman AQ™ 48, use 55% alcohol or less. A little less can provide better hair spray clarity.

Formulation pH and order-of-addition

- When using an acidic co-resin that requires neutralization, neutralize to pH <7.8 (75% neutralization for Balance™ 47 polymer).
- When using an acidic co-resin that requires neutralization, add the amine or other neutralizing agent to the Eastman AQ™ 48 dispersion after all of the alcohol has been added; or use a 2-part procedure as given in Eastman Publication CB-104. The 2-part procedure requires two vessels, but is faster than a 1-part procedure.

¹Volatile Organic Compound

EASTMAN

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