

Technical Data Sheet

Eastman AQ™ 48 Ultra Polymer

Chemical Synonym

INCI: Polyester-5

Applications

- Hair care ingredients
- Inks
- Paints & coatings
- Personal care & cosmetics packaging
- Personal care ingredients

Key Attributes

- Excellent film formation with and without alcohol
- Excellent hold under high-humidity conditions
- Fast drying hairsprays
- Good wash-out with shampooing
- High gloss
- Low film tack-wet or dry
- Low-viscosity hairsprays

Product Description

Eastman AQ™ 48 Ultra polymer is a sulfopolyester that disperses directly in a mixture of ethanol and water at room temperature or in warm water without the assistance of surfactants or other additives. Low-viscosity aqueous dispersions can be prepared at concentrations up to 30% polymer solids. The aqueous or hydroalcoholic dispersions have water-like viscosity at concentrations up to about 20% polymer. AQ polymers aid the dispersion of hydrophobic ingredients in water-based formulations and films formed from the dispersions are clear and glossy at room temperature. AQ 48 Ultra polymer was designed specifically for use as a hair fixative in 55% VOC hairspray. Therefore, it is more compatible with higher levels of alcohol than Eastman AQ™ 38S or 55S, and has good wash out with shampooing. AQ 48 polymer provides excellent hold at high humidity in aerosol and pump hairsprays, as well as in clear styling gels. Eastman AQ 48 has a T_g (glass transition temperature) of about 48°C. AQ 48 polymer is supplied as pellets.

Typical Properties

Property ^a	Typical Value, Units ^b
General	
Form	Pellets
Color	Pale amber
Glass Transition Temperature (T _g)	
Dry Polymer	40-50 °C
Inherent Viscosity	0.26-0.32 dL/g
Acid Number (mg KOH/g)	<2
Hydroxyl Number	<10 mg KOH/g
Bulk Density	6.9 lb/gal

^aUnless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

^bUnits are in SI or US customary units.

Comments

Properties reported here are typical of average lots. Eastman makes no representation that the material in any particular shipment will conform exactly to the values given.

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