

# Technical Data Sheet

## Eastman AQ™ 38S Polymer

### Chemical Synonym

INCI: Polyester-5

### Applications

- Adhesives/sealants-b&c
- Paints & coatings
- Personal care ingredients
- Skin care ingredients

### Key Attributes

- Aids the emulsification of organic ingredients
- Low-viscosity hairsprays
- No neutralization needed
- Quick drying
- Water resistant

### Product Description

Eastman AQ™ 38S polymer is a sulfopolyester that disperses directly in hot water without the assistance of amines, cosolvents, surfactants or other additives. AQ 38S polymer aids the dispersion of many hydrophobic ingredients in water-based products and forms clear films at room temperature from aqueous dispersions. Eastman AQ™ polymers differ chiefly in glass transition temperature (T<sub>g</sub>) or softening point. As indicated by the number in the product name, Eastman AQ 38S polymer has a T<sub>g</sub> of about 38°C. The "S" indicates AQ 38S is supplied as solid pellets. Eastman AQ linear polyesters serve as film formers in numerous cosmetic and personal care applications. Because of its low T<sub>g</sub>, Eastman AQ™ 38S forms flexible films on the skin. It imparts a smooth feel to creams, lotions, and sprays and adheres to the skin. Thus, it is useful as a film-former in sunscreen products, providing excellent water resistance. AQ 38 is added to the water phase and aids the emulsification of oil-phase UV absorbers. AQ 38 provides improved coverage for sprayable sunscreens.

### Typical Properties

Property <sup>a</sup>	Typical Value, Units <sup>b</sup>
<b>General</b>	
Form	Pellets
Color	Pale amber
Glass Transition Temperature (T <sub>g</sub> )	
Dry Polymer	35-38 °C
Inherent Viscosity	0.32-0.40 dL/g
Melt Viscosity	
@ 200°C	9700 poise
Acid Number	<2 mg KOH/g
Hydroxyl Number	<10 mg KOH/g
Bulk Density	6.5 lb/gal

<sup>a</sup>Unless noted otherwise, all tests are run at 23°C (73°F) and 50% relative humidity.

<sup>b</sup>Units 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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