



Instrumental Polymer Technologies, LLC

Technical Data Sheet

QUICKSTAR™ 94X-AC

APPEARANCE.....CLEAR LIQUID
MOLECULAR WEIGHT RANGE.....600 TO 1,200g/mole
EQUIVALENT WEIGHT.....132g/equivalent
HYDROXYL FUNCTIONALITY.....12-22
VISCOSITY (100% SOLIDS AMBIENT).....5-15 POISE
DENSITY.....1.13 g/ml (9.40 lb/gal)
SOLUBILITY IN WATER.....COMPLETE

Description

QUICKSTAR™ 94X-AC is an aliphatic polycarbonate polyol synthesized into the shape of a spherical dendrimer. Its surface is high functionality hydroxyls which make the dendrimer completely soluble in water. Because the surface hydroxyls of QUICKSTAR™ 94X-AC are anionically charged they will crosslink with the carboxylates of synthetic emulsions.

Applications

QUICKSTAR™ 94X-AC is particularly useful as a more practical replacement to carbodiimides or aziridine for improving the strength, hardness, abrasion and chemical resistance of one component acrylic latex or PUD emulsions. It achieves this by adding only 6-10% relative to resin weight (usually 3-5% relative to the supplied emulsion). Because this interaction doesn't occur until the volatile amines of the emulsion evaporate, the QUICKSTAR™ 94X-AC can be added to the emulsion and stored as a formulated one component paint. QUICKSTAR™ 94X-AC is an excellent way to make acrylic emulsions perform like PUDs or to improve the physical performance of PUDs. The high functionality of the hydroxyls insures the resulting coatings dry quickly and yield a film which is water resistant.