



Instrumental Polymer Technologies, LLC

Technical Data Sheet

QUICKSTAR™ 240MC

APPEARANCE.....CLEAR LIQUID*
MOLECULAR WEIGHT RANGE.....600-2000g/mole
EQUIVALENT WEIGHT.....240g/equivalent
HYDROXYL NUMBER.....235 mgKOH/g
HYDROXYL FUNCTIONALITY..... 3 - 12
VISCOSITY (100% SOLIDS AMBIENT).....300-400 POISE
SOLUBILITY IN WATER.....0%
SOLUBILITY IN BUTYL ACETATE.....COMPLETE
SOLUBILITY IN TOLUENE.....COMPLETE

Description

QUICKSTAR™ 240MC is an aliphatic polycarbonate dendrimer with multiple hydroxyl functionality with a highly branched aliphatic polycarbonate core which offers excellent hardness, toughness and chemical resistance when cured with isocyanates to yield urethane coatings.

Though this material has high viscosity at 100% solids, the spherical shape of the dendrimers enable it to reduce in viscosity quickly with only a small amount of solvent. Consequently it is ideal for forming high solids coatings which need to cure quickly with isocyanates to form a very hard and abrasion resistant coating. It is soluble in a wide range of organic solvents, including both polar solvents such as acetone, or nonpolar solvents like butyl acetate.

This polycarbonate dendrimer cures quickly with isocyanates to yield polycarbonate polyurethanes with excellent toughness such as abrasion resistance and impact resistance. Rarely is there such a combination of hardness and toughness.

The carbonate linkage offers excellent resistance to UV exposure, chemicals and water. Particularly unique is the fact that our QUICKSTAR polyols can form polyurethanes for continuous submersion in water. This property, along with the abrasion resistance makes the product excellent for uses where rain or water erosion is a concern.

The dendrimeric shape and high functionality enables high solids coatings formed with this resin to have a long pot life yet a fast dry time. Hardness forms very quickly this dendrimer. It's high viscosity also offers a very fast dry to touch

Applications

QUICKSTAR™ 240MC alone is ideal for use in high solids polyurethane coatings requiring fast curing to form a very hard, clear, tough and chemically resistant finish. It is useful in clear coats or in pigmented system.

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