



NUMBER 4381-3 (Supersedes 4381-2)

Aquaflow™ XLS-500 nonionic synthetic associative thickener

For Low-Shear (KU) Viscosity Build in Low-VOC Waterborne Paints and Coatings

Aquaflow XLS-500 rheology modifier is a solvent-free nonionic synthetic associative thickener (NSAT) designed for waterborne paints and coatings. It is highly effective with 100% acrylic and styrene-acrylic resin systems.

Aquaflow XLS-500 NSAT provides an exceptional balance of leveling and sag resistance when used in combination with a high-shear effective NSAT (ICI driver). The optimized rheology modifier package will deliver superior leveling and sag resistance resulting in virtually drip-free application.

Aquaflow XLS-500 rheology modifier significantly improves viscosity retention on tinting compared to conventional NSAT thickeners. Stormer KU loss on tinting is minimized, and final KU values at the point of sale are generally more consistent regardless of colorant or depth of tint.

Typical Properties^(a)

Chemical type	hydrophobically modified polyether (HMPE)
Appearance.....	clear, light amber liquid
Solids, weight %	25 nominal
Carrier	water/surfactant
Viscosity ^(b) as supplied, mPa*s (cps)	< 2,400
Density, lb/gal	8.4
g/mL	1.01
pH, as supplied	6 - 8

(a) Values are typical properties and are not to be regarded as product specifications.

(b) Brookfield LV readings at 25°C.

Product Benefits

- Solvent free
- Excellent leveling
- Superior sag-resistance and film build
- Exceptional viscosity retention on tinting
- Low as-shipped viscosity for handling ease
- Drip resistant rheology
- Excellent gloss development
- Excellent spatter resistance
- pH Insensitive
- Biostable

Applications

Aquaflow XLS-500 rheology modifier has been designed and optimized for use in non-flat 100% acrylic resin formulations for tint and neutral bases. For vinyl acrylic, vinyl acetate ethylene (VAE), or vinyl acetate-VeoVa resin systems, Aquaflow XLS-525, XLS-530 and XLS-550 NSATs are recommended.

This product has been shown to be extremely effective when used in conjunction with a high-shear effective NSAT thickener such as Aquaflow NHS-300 NSAT for efficient ICI viscosity build; however, excellent compatibility has been demonstrated with virtually all categories of synthetic associative thickeners and cellulose ethers.

Incorporation



It is recommended that Aquaflow™ XLS-500 rheology modifier be incorporated into the paint formulation before the addition of the latex.

Volatile Organic Compounds (VOC)

Aquaflow XLS-500 rheology modifier is formulated as solvent-free. As such, this product will have negligible contribution to the VOC content of formulated paints and coatings as determined by US EPA Reference Method 24.

Packaging and Storage

Aquaflow XLS-500 NSAT is supplied in plastic drums of 200 kilos net or in totes of 1050 kilos net. It is recommended to use the product in rotation on a first-in-first-out basis. The product should be stored under dry and clean conditions at room temperature in its original packing away from heat.

Product Safety

Please read and understand the SDS before using this product.