

# TIXOGEL EZ 100

## Gellant

### Product Data

#### Special Features and Benefits

TIXOGEL EZ-100 is designed as an easy-to-disperse, self-activating rheological additive for low and medium polarity solvent based ink systems. TIXOGEL EZ-100 can help reduce misting, improve hold out, and improve yield.

TIXOGEL EZ-100 can be added to the pigment grind or added to finished product to adjust viscosity. TIXOGEL EZ-100 needs no polar activator.

#### Recommended Use

Self-Activating, Easily Dispersed Organoclay for Ink

#### Suitable Solvents/Resins

Rule 66 Mineral Spirits, VM&P Naphtha, Hi-Flash Naphtha, Xylene, and Toluene.

Mixtures of aliphatic and aromatic solvents are also suitable for TIXOGEL EZ-100 use.

TIXOGEL EZ-100 is not recommended for oxygenated solvent systems.

Alkyds, processed oils, epoxy-esters, and oil modified urethanes are all suitable for TIXOGEL EZ-100. TIXOGEL EZ-100 is not recommended for use in 100 % raw oil systems, such as stains.

#### Composition

Quaternary Ammonium Bentonite Complex

#### Typical Properties

The values indicated in this data sheet describe typical properties and do not constitute specification limits.

Density:	11.93 lbs./U.S. gal. (1.43 g/cm <sup>3</sup> )
Bulking Value:	0.084 U.S. gals./lb.
Particle Size:	Ultimate Dispersed Particle Size <1 μm
Moisture Content:	3.0 % maximum
Color/Form:	Light Buff Powder

### Incorporation and Processing Instructions

TIXOGEL EZ-100 can be effectively utilized in the pigment grind in aliphatic solvents or in systems containing 100 % aromatic solvent. When incorporating TIXOGEL EZ-100 into a system containing a mixture of aliphatic and aromatic solvents, the TIXOGEL EZ-100 should be added to solvent with the lowest Kauri-Butanol Value.

When post-adding the TIXOGEL EZ-100, care must be exercised to insure proper dispersion. It is suggested that TIXOGEL EZ-100 be used as a post-additive only in systems with a Kauri-Butanol Value of less than 70. Also remember that high temperature effectively increases the KB Value of a system. Use of TIXOGEL EZ-100 as a post-additive in extremely hot or highly aromatic systems may lead to premature wetting of agglomerates and the formation of seeds. As a general rule add TIXOGEL EZ- 100 to systems at, or below, 120 °F.

It is suggested that EZ-100 be allowed to mix for a minimum of 1 hour when added to a let-down tank with only minimal agitation. Post-addition under a high speed disperser is recommended.

TIXOGEL EZ-100 can be used with processed oil, such as polymerized or blown oils. The use of raw oils in combination with resins will weaken the TIXOGEL EZ-100 gel structure.

TIXOGEL EZ-100 is not recommended for systems based exclusively on raw oils. The effectiveness of TIXOGEL EZ-100 compared with conventional organoclay/activator systems depends upon the functionality of the resin system. Resins with high acid number, phenolic or rosin modification, or other functional groups will generally be well suited for TIXOGEL EZ-100. TIXOGEL EZ-100 will be less effective in resins with low functionality.

The effectiveness of TIXOGEL EZ-100 is optimum in aliphatic systems; mineral spirits, VM&P naphtha. As the Kauri-Butanol Value of the solvent system increases, the relative efficiency of the TIXOGEL EZ-100 decreases.

### Recommended Levels

TIXOGEL EZ-100 is typically used at levels of 0.5 % to 4.0 %. In that range, TIXOGEL EZ- 100 will roughly equal the efficiency of TIXOGEL VP. At higher use levels, TIXOGEL EZ- 100 may be less efficient than TIXOGEL VP.

The above recommended levels can be used for orientation. Optimal levels are determined through a series of laboratory tests.