

THIXATROL® GST

Rheological Additive for Aliphatic and Aromatic Systems

GENERAL INFORMATION

THIXATROL GST rheological additive is an organically modified derivative of castor oil for use in aliphatic and aromatic solvent-borne coatings.

CHEMICAL & PHYSICAL PROPERTIES

Composition	organically modified castor oil derivative with inorganic flow control agent
Color / Form	white powder
Density	1.47 g/cm ³
Incorporation temperature range	aliphatic systems: 63 - 74 °C (145 - 165 °F) aromatic systems: 38 - 54 °C (100 - 130 °F)

These are typical properties not to be used for specification purposes.

APPLICATIONS

- Air-drying industrial finishes
- Anti-fouling paints
- Asphaltic compositions
- Caulks, mastics, adhesives
- Chlorinated rubber coatings
- Decorative coatings
- Epoxies
- Hammer finishes
- High-build finishes
- Polyurethanes (without free isocyanates)
- Sealants
- Traffic paints

KEY PROPERTIES

- Increases viscosity and provides thixotropy
- Contributes to pigment suspension
- Provides sag control without sacrifice of flow and levelling
- Controls penetration into porous substrates
- Does not normally react with system components
- Has no influence on water-resistance of organic systems
- Will not adversely affect paint durability
- Is non-yellowing (in the final formulation)
- Imparts excellent package stability and reproducibility

INCORPORATION

Shear, controlled temperature and time are required for proper activation of **THIXATROL GST**.

THIXATROL GST disperses satisfactory under less intensive shear conditions than those required for **THIXATROL ST**, which requires high-shear disc impellers, pearl and sand mills. However, **THIXATROL GST** has a lower thickening efficiency and a slightly higher addition level may be needed.

It is preferable to incorporate the rheological additive at the beginning of the dispersion. After pre-mixing the rheological additive in a solvent/binder blend for about 5 minutes, other ingredients can be added and the system processed in the normal way.

To obtain the full thixotropic flow properties of **THIXATROL GST**, a processing temperature range of 38 - 54 °C (100 - 130 °F) in aromatic formulations is required during the dispersion stage. In aliphatic solvent systems a temperature range of 63 - 74 °C (145 - 165 °F) should be used.

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LEVELS OF USE

The optimum use levels of **THIXATROL GST** will depend on the system being formulated. In cases where processing under high-shear conditions is not possible, **THIXATROL GST** is the recommended rheological additive, but at higher use levels than with THIXATROL ST.

Typical use levels of **THIXATROL GST** may vary from 0.4 - 1.5 % by weight. In certain cases, for example high-build systems, higher levels may be required.

HEALTH AND SAFETY

Before using this product please consult our Safety Data Sheet (SDS) for information on safe handling and storage. The SDS can be found on the company website.

STORAGE RECOMMENDATIONS

THIXATROL GST should be kept in a cool, dry location. Avoid stacking pallets in hot climates.

SHELF LIFE

THIXATROL GST has a shelf life of 4 (four) years from date of manufacture.

QUALITY ASSURANCE

Since 1992 the company is a holder of the ISO 9001 / ISO 9002 certificates, which guarantees that all operations are conducted according to the stipulated standards.

NOTE: The information herein is currently believed to be accurate. We do not guarantee its accuracy. Purchasers shall not rely on statements herein when purchasing any products. Purchasers should make their own investigations to determine if such products are suitable for a particular use. The products discussed are sold without warranty, express or implied, including a warranty of merchantability and fitness for use. Purchasers will be subject to a separate agreement which will not incorporate this document.

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