

THIXATROL® TSR

Rheological Additive

GENERAL INFORMATION

THIXATROL TSR additive is a seed resistant, 35 % solids, liquid organic rheological additive designed for use in conventional and VOC compliant aliphatic and some high solids aromatic solvent based systems.

THIXATROL TSR efficiently provides thixotropic viscosity and sag control in conventional and high solids systems.

CHEMICAL & PHYSICAL PROPERTIES

Composition	low molecular weight polyester amide in aromatic 150 / cyclohexanol
Color / Form	amber / liquid
Density, Liquid	0.93 (gm / cm ³) 7.72 (lb. / U.S. Gal)
Bulk Density	0.13 (U.S. Gal. / lb)
Solids (Non-Volatile)	35 %
Flash Point	121 °F / 50 °C (combustible)

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

APPLICATIONS

THIXATROL TSR additive is suitable for use in most systems where conventional organic thixotropes are used, such as architectural and high solids maintenance paints. It is particularly effective at providing seed-free sag resistance in trade sales coatings. Some typical coating types where **THIXATROL TSR** is recommended include:

- Air dry architectural enamels
- High solids aliphatic and aromatic systems
- Traffic paints
- High build coatings
- **THIXATROL TSR** is generally not suitable for use in systems containing high proportions of aromatic or stronger solvents

KEY PROPERTIES

Features	Benefits
Liquid	<ul style="list-style-type: none"> • Pourable / pumpable • Reduces Waste • Non-Dusting
Highly seed resistant	<ul style="list-style-type: none"> • Speeds production • Lower manufacturing costs • Greater manufacturing flexibility • Eliminates need for rework • No seeding in hot warehouses • Reduced customer returns
Excellent rheology	<ul style="list-style-type: none"> • Thixotropic shear thinning flow • Imparts outstanding sag resistance • Effective in aliphatic & high solids aromatic systems
Efficient	<ul style="list-style-type: none"> • Cost effective rheology control

INCORPORATION

Order of Addition

To the Grind

1. Vehicle / solvent
Mix
2. Additives
Mix
3. Pigments
4. **THIXATROL TSR**
Disperse 15 - 30 mins.

Add letdown while millbase is hot. Cool without agitation.

To the Letdown

1. Vehicle / solvent
Mix
2. Additives
Mix
3. Pigments
Disperse 15 - 30 mins.

continued...

THIXATROL® TSR

4. Letdown

5. THIXATROL TSR

Mix 15 - 30 mins.

Cool without agitation.

Grind addition

High speed dispersers

Add into the millbase after pigment addition as in the order of addition shown above. Achieve the minimum recommended temperature of 100 °F (38 °C) or higher and maintain under shear conditions for 15 - 30 minutes. Letdown while millbase is hot. When letdown is fully incorporated, cool without agitation.

Letdown addition

Achieve the minimum recommended temperature of 100 °F (38 °C) or higher. Add **THIXATROL TSR**. Mix for 15 - 30 minutes. Cool without agitation.

There is no known upper processing temperature limit for **THIXATROL TSR**.

No special precautions are needed when using **THIXATROL TSR** in a sandmill, only that recommended processing temperatures are maintained.

LEVELS OF USE

Typical **THIXATROL TSR** use levels range from 1.0 to 2.5 % by weight of the total system. The optimum loading level will vary depending on the type of system. A loading ladder study is recommended to determine the precise use level for the desired sag control. Some guidelines are as follows:

When replacing conventional castor based thixotropes replacement ranges from 1 to 1 through 1.7 to 1 **THIXATROL TSR** vs. conventional thixotropes by weight.

When replacing organoclays replacement ranges from 0.5 to 1 through 1 to 1 by weight.

THIXATROL TSR has shown no negative inter-actions with surfactants. However, the flocculating types, such as: (1) Byk Anti Terra 202, Anti Terra 204 and P104 may enhance rheological performance. Each such surface active agent must be evaluated for its merits in a particular formulation.

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

Store in a cool (> 40 °F / > 4 °C), dry location. Keep partially used container well sealed to prevent solvent loss.

SHELF LIFE

THIXATROL TSR has a shelf life of 2 (two) 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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