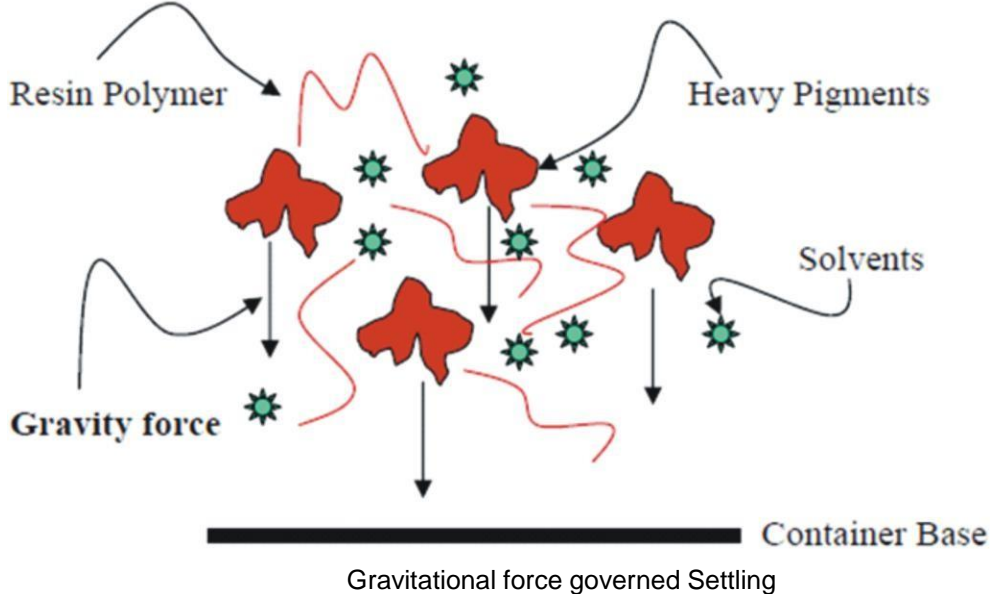


Additive AST 5829 (Anti-set & Thixotropic Agent for Aqueous Systems)

Introduction:

In Aqueous Systems with dispersed Solid Particles like Clay Slurries, Aqueous Paints & Inks etc., keeping the particles in suspension is always a challenge. Formation of hard deposit on prolonged storage, is always a problem. The major cause of the settling is high specific gravity of the Pigments/Fillers. Sedimentation causes a severe problem. Many a times, it is difficult to put the settled mass back into suspension easily. "Additive AST 5829" helps eliminate / reduce such heavy settling / sedimentation. "Additive AST 5829" imparts Thixotropic nature to the systems it is incorporated in.

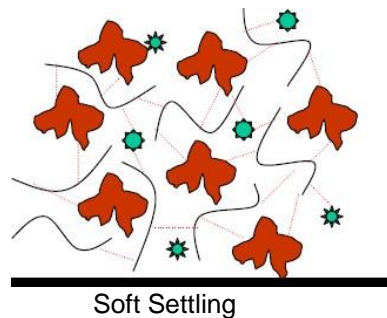
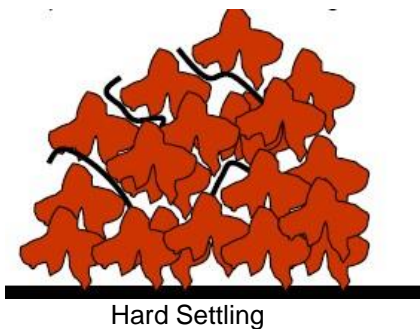


Types of Settling:

Settling in Coatings can be divided to 2 broader types: Hard Settling and Soft Settling. Although both are settling phenomena, formulators try to formulate Coating not leading to Hard Settling.

Hard settling

When pigments sink to the bottom, on prolonged storage, it gets packed closer and closer to each other. In addition, tackiness of the resin also supports to bind them together, making the situation worse and difficult to disperse back to its original condition. Thus high speed agitators are needed. Sometimes, Hard Settling is as hard as rock that makes it impossible to re-disperse and bring it to its original state.



Soft Settling

It is also a kind of Settling. This phenomenon is not as severe as Hard Settling and can be easily dispersed back to its original condition by low shear force. Soft settling is mainly related to Hydrogen Bonding. The hydrogen bonds are formed mainly between resin, solvent, anti-settling agent and also surface of the pigments. This hydrogen bonding forms a network, like fishing net in the system. This prevents the pigments coming closer to each-other densely. By this, it makes it easier to re-disperse again by low shear force. This kind of settling happens mainly in the systems that have an anti-settling agent incorporated therein. However, settling is greatly influenced by efficiency of the anti-settling agent.

Technical Data:

Appearance	: Greyish turbid viscous liquid
Description	: Ester with cellulosic derivative
Nature	: Blend of anionic & non-ionic
Specific Gravity	: 1.07 ± 0.05
pH	: 7.0 ± 1.0

NOTE: The physical data presented above are typical values and should not be construed as a specification.

Applications:

- Aqueous flexo inks
- Latex emulsion paints
- Foundry coatings
- Clay slurries
- Aqueous pesticide / industrial suspensions

Dose:

- 0.5 to 1.5% on the basis of powder content (pigments + fillers) or 0.3 to 0.8% on total system.
- Ensure proper dispersion of Additive AST 5829 in the system with high speed agitation.
- It is strongly recommended to determine final dosage by experiments for specific system/s.

Incorporation Level: Additive AST 5829 can be incorporated at any stage of production, but suggested to add at dispersion / grind stage.

APEO FREE PRODUCT

DISCLAIMER

This product is manufactured to rigid control Specifications. It is impossible to control the use & application. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose. Therefore, Harmony Additives Private Limited's sole liability is limited to replacing quantities of products proven to be defective. Harmony Additives Private Limited disclaims any liability for the cost of other Raw Material/s or any other use of product.