



Functional Additives for Paint

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Product Category	<ul style="list-style-type: none"> ● Functional Additives for Paints
Application	<ul style="list-style-type: none"> ● Water based paints ● Solvent based paints
Key Function(s)	<ul style="list-style-type: none"> ● Improve the specific properties of paints ● Make the suitable paints for end-application ● Reliable additives to maintain stable and consistency paint quality

Stellar Unity is a sales representative of Schwegmann, from Germany, which is a maker of Functional Additives for paints, both water based and solvent based. And yet Stellar Unity has started to keep a few products for inventory in Thailand. Specific Functional Additives are listed below;

1. Wetting and Dispersing Agents

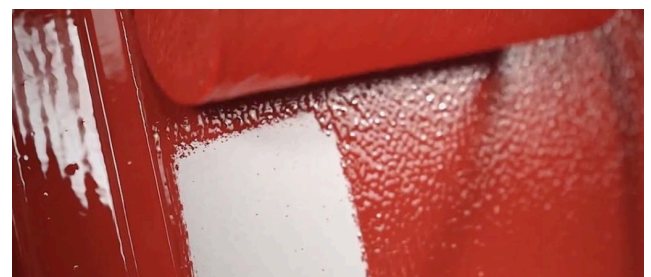
Both are crucial additives in paint formulations. They enhance the performance and quality of paints by improving the interaction between pigments, the liquid medium, and the substrate.

Wetting agents lower the surface tension of the liquid phase (usually water or solvent) in the paint, allowing it to spread more easily and uniformly over the surface of the pigment particles. This enhances the ability of the paint to cover and adhere to surfaces, leading to a smoother application. Wetting agents help the paint to spread and wet the pigments or substrates better, ensuring that the liquid phase can properly cover and interact with the pigment particles. Without wetting agents, pigment particles might remain clumpy or poorly dispersed, leading to poor color and texture.

Dispersing agents are used to break up and stabilize pigment particles, preventing them from clumping together or settling in the paint. This improves the stability, consistency, and color intensity of the paint, making sure the pigment stays evenly distributed. Dispersing agents modify the surface energy of the pigment particles and help them remain separate in the liquid medium. They often provide electrostatic or steric stabilization to prevent aggregation of the pigments over time.

2. Defoaming Agent/Deaerators

Defoamer is an additive used in paint formulations to control or eliminate foam during the manufacturing process, application, and drying stages of the paint. Foam can form due to air trapped in the paint mixture, either during mixing, grinding of pigments, or even during application (e.g., when the paint is brushed or sprayed). If not properly managed, foam can lead to



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surface imperfections, uneven finishes, and reduced quality in the final product. Purposes of defoamer in paint are;

- **Prevent Foam Formation:** Defoamers help prevent the formation of foam in paint during mixing, stirring, or application.
- **Break Existing Foam:** They also break down or collapse any foam that has already formed, ensuring a smooth, bubble-free paint.
- **Improve Finish:** Foam can lead to defects like pinholes, craters, or an uneven surface, so eliminating it helps achieve a smooth, flawless finish.
- **Increase Efficiency:** By reducing foam, defoamers improve the efficiency of the manufacturing and application processes, as less time and effort are required to manage foam.

3. Anti-Skinning Agents

Anti-skinning agents are additives used in paint formulations to prevent the formation of a skin or solid layer (often called a "skin") on the surface of the paint while it is in the container or during storage. Skinning occurs when paint is exposed to air, causing the solvents or water in the paint to evaporate, which leads to the formation of a dry, solid film or "skin" on the surface. Purposes of Anti-skinning Agents in paint are;

- **Prevent Skin Formation:** Anti-skinning agents inhibit the oxidation and evaporation processes that lead to the formation of a skin on the surface of the paint.
- **Preserve Paint Quality:** By preventing skinning, these agents ensure that the paint remains usable and homogeneous throughout its shelf life. A skin can cause inconvenience, as it requires removal before the paint can be used again.
- **Improve Convenience:** With anti-skinning agents, there is less need for extra effort or time spent removing dried skin from paint containers, making the product easier to store and handle.

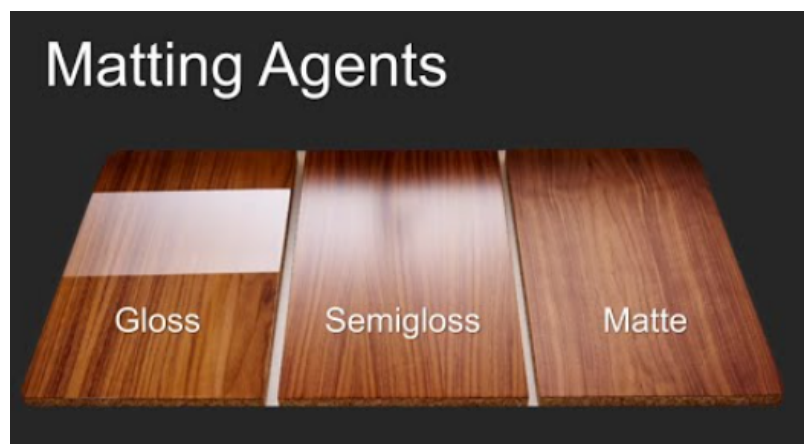
4. Thickeners

A thickener in paint is an additive used to adjust the viscosity (thickness) of the paint. By increasing the thickness, thickeners help control the flow and application characteristics of the paint, making it easier to apply, preventing excessive dripping, and enhancing the paint's overall performance on surfaces. Purposes of Thickeners in paint are;

- **Control Viscosity:** Thickeners are used to modify the viscosity of a paint, making it either more viscous (thicker) or less viscous (thinner). The right viscosity is essential for achieving proper flow, leveling, and coverage during application.
- **Improve Application:** A thicker paint is less likely to drip or sag, making it ideal for vertical surfaces or for use in spray applications. It also helps the paint to stay on the surface longer, allowing for better control and a smoother finish.
- **Increase Paint Stability:** Thickeners can help suspend solid pigments and other particles in the paint, preventing them from settling out or separating over time.
- **Enhance Performance:** By improving the application properties, thickeners contribute to the durability, texture, and uniformity of the finished paint.

5. Matting Agents

A matting agent is an additive used in paint formulations to reduce the gloss or shine of the paint, producing a matte or satin finish. Matting agents are often used in decorative paints, coatings, and other applications where a non-reflective surface is desired. They are particularly useful in situations where high gloss is not aesthetically preferred, or where it may be undesirable due to factors like glare, fingerprints, or surface imperfections. Purposes of Matting Agents in paint are;



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- **Reduce Gloss:** The primary function of a matting agent is to reduce the gloss level of the paint, creating a flat, matte, or satin finish. The level of gloss can be controlled depending on the type and quantity of matting agent used.
- **Enhance Aesthetics:** Some paint finishes require a non-reflective surface, such as in walls, ceilings, or certain decorative objects, where a matte finish is preferred for a more subtle or sophisticated look.
- **Improve Surface Appearance:** Matte finishes can help mask surface imperfections like cracks, bumps, or irregularities by diffusing light rather than reflecting it, leading to a smoother, more even appearance.
- **Functional Uses:** In some cases, matte finishes are used for practical reasons. For instance, a matte finish can reduce glare, which is important in certain environments like office spaces, studios, or display areas.

Schwegmann's products are available in many application areas. Feel free to explore the website of Schwegmann for more product details.

<https://www.schwegmannnet.de/index.php/en/>

As the sales representative of Schwegmann, Stellar Unity is looking forward to collaborating with you using the high technology and reliable products from Germany.



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