

SURFACTANT EXUDATION

The term surfactant is a contraction of 'surface active agents' which include wetting agents, dispersants, defoamers and emulsifiers. These agents help improve wetting properties, disperse white and color pigments, improve color acceptance, and inhibit foam.

Exudation (also sometimes referred to as 'sweating' or 'bleeding') is the migration of a substance to the surface, as is often seen in connection with tannins or resins from wood which bleed into paint or primer films.

Surfactant exudation generally appears as shiny, sometimes amber spots, which may streak, staining surfaces below a freshly painted surface, after the film has apparently dried.

Painting during damp, cool periods, late in the day, or when the temperature and humidity approach the dew point soon after application may lead to exudation. This phenomenon is particularly common in South Florida, where high humidity is prevalent most of the year.

Heavy film thickness, or applying multiple coats of paint in a single day, may retard through cure and increase the opportunity for exudation to occur.

Exudation is most common in deep and accent colors where common machine colorants typical of the paint industry are added at the point of sale. Universal tinting colorants used by paint companies tend to have high concentrations of surfactants, which are necessary for acceptable color acceptance.

When identified early after it appears, surfactant exudation may often be rinsed from the surface with plain water. Depending on climatic conditions and the thickness of the paint film, exudation may reoccur, and several rinsings may be necessary before the agents have completely escaped from the film.

If allowed to dry, exudation may turn to a varnish-like deposit and may be very difficult or impractical to remove. In these instances, the surface must be touched up or repainted.

Film integrity or coating performance is not affected by surfactant exudation, since the agents have already served their function.