

RUST BULLET, LLC

www.RustBullet.com



SOLVENT POPPING

Small bubbles, blistering, pinholes, or crater-like openings in or on the paint film.

Solvent (thinners/reducers) becomes "trapped" in the paint film when the surface layer skins over too quickly, preventing their evaporation into the atmosphere. Solvents that vaporize within the paint film leave bubbles, pinholes or craters as they push through and "pop" the surface. Solvents can be trapped due to:

- 1. Thinner/reducer evaporating too fast for spraying conditions;
- 2. Inadequate flash time between coats;
- 3. Excessive film thickness or "piling on" of heavy/wet coats;
- 4. Too much air movement causing surface to "skin over" before solvents evaporate;
- 5. Excessive purge/flash time before force drying.

To repair solvent popping allow finish to thoroughly dry/cure, sand smooth and refinish affected area. Inspect surface carefully to ensure all craters have been removed. Severe popping will require removal of the affected film. Recoat with Rust Bullet, as necessary.

To prevent solvent popping select recommended thinner/reducer based on temperature, humidity, air movement and size of repair. Always allow for proper flash time between coats and avoid "piling on" or double wet coats. Restrict air movement over the surface being painted and avoid extended purge/flash time before force drying. Fine dust particles that fall on a tacky surface can be encapsulated by the wet film, creating an appearance almost identical to solvent pop. This "solvent pop" appearance usually occurs on vehicles that are removed from the booth in a somewhat tacky condition and placed in another location to dry. Fine dust contamination can be removed by sanding and polishing. However, if the condition is solvent pop, the finish will contain pinholes or small craters after being sanded.

<u>PINHOLING</u>

If a spray gun has been improperly adjusted, air may be entrapped in the coating during atomization to cause pinholing or holidays in the film. These are very small holes that usually expose the substrate or previous coat. It can also occur when the spray gun is held too close to the surface or when there is surface contamination.

In order for a coating to provide maximum protection to a substrate, it must be applied as a uniform, continuous film. To obtain such films, the applicator must use the best available application techniques. In spray applications, these include constant gun-to-substrate distance (no wanding), constant rate of gun travel and constant spray pattern and triggering. Coating Failures always occur first at holidays or areas of reduced coating thickness.

BLISTERING

Coatings in a confined space may require both heating and ventilating to completely remove all solvent from coatings, so they completely cure. Otherwise, solvent entrapped under the surface of the coating may cause the coating to remain softer, more flexible, and subject to blistering.