

TROUBLESHOOTING

PAINT DEFECT/ISSUE:

SOLVENT POP

Popping is caused when solvents (either reducers added at the point of use, or solvents comprising part of the original coating formula) become trapped beneath the forming surface of the paint film. When applying paint, these solvents must be allowed to evaporate before recoating. In situations where the paint film begins to set up before all solvents have fully evaporated, the solvent gasses become trapped just beneath the surface. At the point where they eventually escape through the already-forming paint film, a “popping” effect is created, leaving what looks like tiny pinholes, small craters or gas bubbles.

APPEARANCE:

Tiny pinholes spread throughout paint film. May also appear as small craters or gas bubbles suspended in paint film.

CULPRITS:

There are several reasons why solvents can become trapped beneath the surface of the paint film, thus creating the “solvent pop” appearance. They are:

Poor choice in reducer: The wrong grade or the wrong temperature reducer can cause solvents to evaporate too slowly for the type of paint and conditions of the application.

Not enough flash time: Not waiting long enough between consecutive coats can trap solvent evaporating from the first coat beneath the film surface of the second coat.

Too much paint: The heavier the paint coat, the further the solvent must travel to reach the film surface and therefore, the longer it takes for all solvents to evaporate.

Excessive heat: Paint films form faster at higher temperatures. In shops with excessive heat conditions, film may begin to form before all solvent has evaporated.

Insufficient cross ventilation: Without proper cross ventilation, solvents will not be drawn out from the forming paint film as quickly as is needed. In shops with poor cross ventilation, film may begin to form before all solvent has evaporated.

TO FIX:

Once paint has cured completely, sand out all “solvent pops” and other imperfections, then reapply coating.