Basecoat Color Application - Solvent

1. **TINTING:**

When the actual vehicle color does not match the OE standard and is not close enough to blend, the paint formula needs to be adjusted to get the color closer. This process, commonly referred to as tinting, is one of the most difficult tasks a paint technician performs during the repair. When tinting colors, there are five areas that the painter must balance:

* 1. hue/color
  2. value/lightness
  3. chroma/richness
  4. metallic size
  5. flop/angle perspective.

It is a time-consuming process and rarely results in an exact match due to the variables described above. Therefore, PPG recommends tinting only to get the color to a blendable match.

1. **SPOT REPAIR:** When performing a spot repair, the idea is to minimize the repair area. The repair area receives full coverage and the surrounding area receives partial coverage creating an undetectable color transition. The entire repaired panel is clearcoated. If there is not enough room between the repair area and the adjacent panel(s), the color must be blended onto the adjacent panel. All panels that are painted should be clearcoated in their entirety.
2. **FULL PANEL:** When replacing a panel, blending color onto the adjacent panel(s) is a necessary operation that results in an undetectable color transition. If a spot repair occurs close to a panel edge, the color should be blended onto the adjacent panel(s) as well. All panels that are painted should be clearcoated in their entirety.
3. **OVERVIEW -** Vehicle manufacturers select colors years before the actual vehicles are painted at the factory. Once these model year colors are selected, they are provided to paint manufacturers. PPG creates formulas to match these standards. There are many steps to the manufacturing process and variations can occur throughout. They may be due to one step being out of tolerance or a culmination of many steps being close to unacceptable.

Examples of these potential variations include different paint manufacturers supplying the OE plant, different application equipment used at the factory, shearing of metallics as they tumble through the supply line, parts painted separate from the vehicle body, to name a few. The end result is that the actual car color does not match the OE standard.

1. **REDUCER SELECTION**

Reducers in solvent basecoat should be selected according to the temperature of the environment in which the vehicle is sprayed. Selecting slower solvents will result in a smoother finish, better metallic orientation and better drying of the basecoat. Faster solvents will flash off the surface too quickly and may lead to mottling, poor drying characteristics for taping, and die-back in clearcoats. Be sure to check the temperature ranges for the reducers available with the solvent basecoat you're using.

1. **BASECOAT TIMING**
   1. Basecoat can be cleared in 20 minutes air dry for 3 coats.
   2. REMEMBER with more coats of basecoat, longer dry times will yield better gloss and less chance of die-back in the clearcoat.
   3. An overnight dry will provide better results when more than 3 coats of base are applied.
   4. If you apply 2 wet coats of basecoat blender before 24 hours expire, you can extend clearcoat time another 24 hours.
   5. Color blenders can be used as a inter-coat clear for two-tones, custom painting and multiple colors. This will protect the basecoat color from tape marking and paint blow through, as well as protect any artwork.
   6. When adding basecoat activator to any color containing dyes, all basecoats must be applied in **1** hour at **70 degrees,** otherwise lifting can occur.