



### Color difference / Gloss difference

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Refers to a paint film finished to a color tone or gloss deviating from the specified color tone or gloss.

(standard panel)

Note: This applies to cases where preliminary checks detected no color tone or gloss difference between coated panels of the batch and the standard panel.

Note: Use care because popping may appear like dust.

**Q1:**

**Is the film thickness correct?**

**A1:**

Adjust to the specified film thickness.

A thinner film fails to hide, and its color is affected by, the substrate color.

**Q2:**

**Did you change the coating equipment?**

**A2:**

It is desirable to use the same coating equipment because the color tone shifts with different coating equipment types (e.g. air spray, airless, and electrostatic coaters).

**Q3:**

**Did you change the batch of paint?**

**A3:**

Check whether there was a recent batch change or an old batch was used.

**Q4:**

**Did you stir the paint sufficiently?**

**A4:**

Stir the paint sufficiently to make it homogenous.

**Q5:**

**Is the viscosity of the paint appropriate?**

**A5:**

The color and gloss change with paint viscosity.

Ensure appropriate viscosity during coating.

**Q6:**

**Did you use an appropriate flow delivery and atomization pressure?**

**A6:**

The color and gloss change with discharge quantity and atomization pressure.

Use an appropriate flow delivery and atomization pressure.



**Q7:**

**Are the drying conditions appropriate?**

**A7:**

**For baking**

- Overbaking causes color difference and gloss difference.
- Measure the oven temperature and adjust the baking temperature and time properly.

**For air drying**

- The temperature and humidity may sometimes cause brushing. Be careful about the appropriate temperature and humidity.
- Air-drying paints are subject to color difference and/or gloss difference depending on the type of drying: air or forced drying.

**Q8:**

**Is there any contamination or incorrect type of paint?**

**A8:**

Check the paint film using paint/coating from a fresh can.

**Q9:**

**Is it metamerism?**

**A9:**

Use the same paint/coating to prepare standard panels.

Control the appearance close to the standard panel.

Note differences between our paint and our competitors' paint (standard panel).

\* Metamerism: It is a phenomenon in which the color tone varies with the type of light source used to examine the color.

**Q10:**

**Is it an effect of thermochromism?**

**A10:**

Red colors in particular exhibit a different color tone when observed immediately after baking, with the substrate being still hot. Normally, paint films are observed one day after baking.

(If in a hurry, water is used to cool the substrate.)

**Q11:**

**Is the standard panel clean?**

**A11:**

If soiled or past the expiration date, renew the standard panel.

**Q12:**

**Is it recoating?**



**A12:**

Check the recoating film thickness to see whether the specified film thickness has been achieved.

**Q13:**

**For two-component paints, is the mixing ratio as specified?**

**A13:**

Adhere to the correct specified mixing ratio and stir the paint sufficiently.

**Q14:**

**Did you use an appropriate thinner?**

**A14:**

Use of a low-solvency thinner results in color and/or gloss variation.

Use an appropriate thinner.