Blushing of Lacquer

Definition
• The appearance of whitish areas in the film caused by absorption of water vapor by the drying film. Often occurs when rapid evaporation of solvent cools the air over the coating below the dew point.

Causes of Blushing of Lacquer
• High humidity/high dew points/low temperatures in spray/drying areas.
• Cool, moist drafts in spray/drying areas.
• Poor grade or incompatible lacquer thinner.
• Cold Lacquer.
• Moisture in atomizing air of spray equipment.
• Incompatible products used together.

Prevention of Blushing of Lacquer
• Add lacquer retarder, increasing the dry time of a coating and reducing condensation.
• Warm the spray and drying areas.
• Close windows and doors to reduce drafts.
• Use a higher grade or more compatible lacquer thinner.
• Store and use lacquer at room temperatures.
• Use moisture trap to eliminate water in air supply.
• Always use compatible products.

Possible Fixes for Blushing of Lacquer
• Strip and refinish.
• Sand and recoat.
• Apply a light wash coat of lacquer or lacquer thinner over the “blush”.
• Lightly dampen a rag with lacquer thinner and place over or gently rub the “blush”.

Questions to Ask
• Has the product been altered in any way?
  – Thinners, retarders, colorants, additives, any other additional adds to the product?
• Were there any products (water based, oil based, glazes, stains) used that may have left residual material behind?
• What are the environmental conditions, both during application and cure?
• Have things changed, including equipment and personnel?
• Are the products being used compatible?
• Are the products being used from the same manufacturer?
• Was there any preliminary testing of this system before it was used on a larger scale?
• When in the finish process did you notice the problem?
• What is the humidity, dew point, air movement, and temperature of environment and materials?
• Has this problem happened before?
  – If so, what were the conditions at that time, especially compared to the current conditions?
• Has the product been catalyzed properly?