

Technical Data Sheet

Solutions for Decoration

83 894 - Covercoat

Application	<p>Due to its excellent combustibility and depolymerization, 83 894 can be used for decorations on glass, porcelain, ceramics and enamel. Particular emphasis is to be given to its use for short firing-in processes when the total firing time takes less than 30 minutes, for example.</p> <p>83 894 is well-suited for the heat-release process and has been used successfully for this purpose for many years.</p>
Printing Properties	<p>High printing speeds can be achieved with 83 894, without any cobwebbing or blistering, due to the well-balanced solvent composition.</p> <p>As 83 894 is a flowing covercoat, however, care must be taken when using dryers with a continuous flow of air to avoid the formation of beads caused by too thick a print, or a horizontal predrying zone must be used before running through the dryer.</p>
Film characteristics	<p>After the solvents have evaporated, 83 894 produces an easy-to-handle, stable and slightly ductile film. The recommended dry film thickness should be some 23 µm, and around 10-13 µm for heat-release application.</p>
Application errors	<p>If the recommended processing temperature of 20-25 °C is not observed, i.e. the temperature is lower, cobwebbing may occur when printing, the film thickness may be insufficient and there may be pinholes in the dry film due to poor levelling properties.</p>
Storage	<p>83 894 should be stored in the drums in which it was originally supplied by FERRO in a dry place at room temperature (15-25°C). Always seal opened drums carefully as the composition of the product changes when solvents evaporate from open drums.</p> <p>When this storage recommendation is observed, the minimum shelf life in unopened original drums is 2 years.</p>
Environment	<p>Waste material treatment, environmental health and safety protection has to follow the local regulations and legislation.</p>

Field of application	glass, porcelain, ceramics, enamel
Processing	with automatic and semi-automatic screen printing equipment
Appearance	yellow-tinted, transparent liquid
Composition	polyacrylates; plasticizer; solvents
Viscosity at 23°C [mPa*s]	1300 at 50 1/s ; 1270 at 200 1/s
Degree of thixotropy	non
Consistency	flowing
Density at 20°C [g/cm³]	0,94
Non-Volatile parts (nvp) [%]	35
Flash point according ISO 3680 [°C]	+46
Recommended screen material	PET: 48-80 to --
Blocking stability	not tack-free, interlayer wax paper required
Minimum dry film thickness [µm]	12
Drying figures TZ according to Mettler	TZ 10: 55 ; TZ 100: 692
Recommended working temp. [°C]	20 - 25
Recommended rel. humidity [%]	55 - 60
Thinner	--
Cleaner	80 452

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