

Technical Data Sheet

Solutions for Decoration

80 450 - Covercoat

Application	<p>Due to its excellent combustibility and depolymerization, 80 450 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>80 450 is not suitable for the heat-release process. For recommended heat-release products please refer to our Media Guide.</p>
Printing Properties	<p>High printing speeds can be achieved with 80 450, without any cobwebbing or blistering, due to the well-balanced solvent composition.</p> <p>As 80 450 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 pre-drying zone must be used before running through the dryer.</p>
Film characteristics	<p>After the solvents have evaporated, 80 450 produces an easy-to-handle, flexible and ductile film.</p> <p>The recommended minimum dry film thickness should be some 23 µm.</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>80 450 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	clear or colored, transparent liquid
Composition	polyacrylates; plasticizer; solvents
Viscosity at 23°C [mPa*s]	1950 at 50 1/s ; 1900 at 200 1/s
Degree of thixotropy	none
Consistency	flowing
Density at 20°C [g/cm³]	0,95
Non-Volatile parts (nvp) [%]	42
Flash point according ISO 3680 [°C]	+47
Recommended screen material	PET: 21-140 to 24-120 or corresponding steel mesh
Blocking stability	not tack-free, interlayer wax paper required
Minimum dry film thickness [µm]	23
Drying figures TZ according to Mettler	TZ 10: 41 ; TZ 100: 827
Recommended working temp. [°C]	20 - 25
Recommended rel. humidity [%]	55 - 60
Thinner	--
Cleaner	80 452

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