

Technical Data Sheet

Solutions for Decoration

L 409/3 - Covercoat - tack-free

Application	<p>Due to its good combustibility and depolymerization, L 409/3 can be used for decorations on porcelain and ceramics.</p> <p>Particular emphasis is to be given to the tack-free surface of this covercoat after drying.</p> <p>L 409/3 is thus used as a "tack-free" covercoat for decors that have not been printed with pastes which have high medium contents. L 409/3 can also be used for the heat-release process as a result of its good blocking stability.</p>
Printing Properties	<p>High printing speeds can be achieved with L 409/3, without any cobwebbing or blistering, due to the well-balanced solvent composition.</p>
Film characteristics	<p>After the solvents have evaporated, L 409/3 produces an easy-to-handle, flexible film. After drying, the surface is silk-matt and virtually tack-free.</p> <p>If the printing inks have not been printed on top of one another several times and too thickly, interlaying wax paper can be dispensed with if the ceramic decals are stored in a vertical position. As the surface tackiness depends to a large extent on the plasticizer content of the printing inks, it is absolutely necessary to test the blocking stability at the highest temperatures expected in the environment where the ceramic decals are to be processed. The test for establishing the blocking stability is described in detail in Part B under B 1/5.</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> <p>Tack- (block) free covercoats are less flexible than regular products. As all decals lose flexibility during storage, this should be accounted for as an additional parameter, in order to supply decals with the desired flexibility for use. Raised application temperature as well as plasticizing additives or a combination of the two helps to apply rigid decals properly.</p>
Storage	<p>L 409/3 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
Processing	with automatic and semi-automatic screen printing equipment
Appearance	cloudy liquid
Composition	polyacrylates; plasticizer; solvents
Viscosity at 23°C [mPa*s]	2300 at 50 1/s ; 2100 at 200 1/s
Degree of thixotropy	low
Consistency	thixotropic
Density at 20°C [g/cm³]	0,95
Non-Volatile parts (nvp) [%]	44
Flash point according ISO 3680 [°C]	+47
Recommended screen material	PET: 21-140 to 24-120 or corresponding steel mesh
Blocking stability	tack-free
Minimum dry film thickness [µm]	23
Drying figures TZ according to Mettler	TZ 10: 45 ; TZ 100: 860
Recommended working temp. [°C]	20 - 25
Recommended rel. humidity [%]	55 - 60
Thinner	--
Cleaner	80 452

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