Technical Data Sheet

Solutions for Decoration

80 2024 - Heat-Release Downcoat

Application	80 2024 is a downcoat that has been developed exclusively for the heat-release process. Perfect halftone screen printing on heat-release wax paper is only possible once a very thin downcoat has been applied, as the adhesion of the halftone dot is insufficient if printed directly on the paper. In addition, the downcoat largely prevents the screen mesh from being clogged by wax particles flaking off the paper. A further advantage is the fact that the decal adheres better to the object being decorated since the transferred wax layer is more even. A very thin layer of only some µm is required to achieve the features mentioned. For colors which display critical firing, which could possibly be caused by the downcoat 80 2024, we recommend using solely the protective coating 80 2018 or mixing at a 1 : 1 ratio with this product.
Printing Properties	The thin downcoat necessary for the heat-release technique allows high printing speeds to be achieved with this product. The drying time is very short as a result of the thin coat.
Film characteristics	After the solvents have evaporated 80 2024 produces a silk-gloss, tack-free film. The properties have been optimized for the heat-release process. The dry film thickness should be some 3-7 µm.
Application errors	If processing temperatures drop below 20-25 °C, this may result in poor levelling properties on the printed surface, the film thickness may be insufficient and there may be pinholes in the dry film. 80 2024 is not suitable as a down-coat for precious metal preparations (lustrous gold).
Storage	80 2024 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. When this storage recommendation is observed, the minimum shelf life in unopened original drums is 2 years.
Environment	Waste material treatment, environmental health and safety protection has to follow the local regulations and legislation.

80 2024 - Heat-Release Downcoat

Solutions for Decoration

Field of application	porcelain, ceramics, HR: Reel to Reel
Processing	with automatic and semi-automatic screen printing equipment
Appearance	opaque liquid
Composition	cellulose derivatives; plasticizer; solvents
Viscosity at 23°C [mPa*s]	930 at 50 1/s ; 890 at 200 1/s
Degree of thixotropy	none
Consistency	flowing
Density at 20°C [g/cm³]	0,94
Non-Volatile parts (nvp) [%]	27
Flash point according ISO 3680 [°C]	38
Recommended screen material	PET: 180-31 to --
Blocking stability	tack-free
Minimum dry film thickness [µm]	3-7
Drying figures TZ according to Mettler	TZ 10: ; TZ 100: not measured
Recommended working temp. [°C]	20 - 25
Recommended rel. humidity [%]	55 - 60
Thinner	--
Cleaner	80 452

Ferro GmbH I Gutleutstrasse 215 I Postfach 110403 I 60039 Frankfurt/Main Germany
P +49 6927116.0 F +049 6927116.321 E info-pcg@ferro.com W ferro.com