

Technical Data Sheet

Solutions for Decoration

NR. 209 - Screen Printing Medium

Application	<p>NR. 209 is very well-suited for applying decorations to porcelain, ceramics and enamel.</p> <p>Due to its low content of non-volatile-parts, color pastes with NR. 209 are printable in very thin layers.</p>
Printing properties	<p>NR. 209 is a flowing printing medium that displays very good printing properties for surfaces and lines with good reproduction of detail.</p>
Miscibility	<p>As all the printing media are based on redissolvable (reversible) resins, there is the risk that the inks on vertical surfaces run together with the flowing covercoat. The risk increases when the pasting ratios fall below a CPVC of 53%.</p>
Application errors	<p>In the tables listed in B 3 we recommend the pasting ratios for all common color selections, in accordance with the maximum CPVC. Failure to adhere to these ratios, i.e. using less than the recommended minimum quantity of printing medium (M), can lead to firing defects such as pinholes etc..</p> <p>If the viscosity of the printing paste mixed according to the recommended pasting ratio is too high, problems with printing and production run-on often occur. In this case the viscosity can be reduced by adding 0.5 to a maximum of 1 % of our dispersing agent 80 604.</p>
Storage	<p>NR. 209 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	porcelain, ceramics, enamel
Processing	with automatic and semi-automatic screen printing equipment
Appearance	opaque liquid
Composition	polyacrylates; plasticizer; solvents
Viscosity at 23°C [mPa*s]	405 at 50 1/s ; 400 at 200 1/s
Degree of thixotropy	none
Consistency	flowing
Density at 20 °C [g/cm³]	0,98
Non-Volatile parts (nvp) [%]	31
Flash point according to ISO 3680 [°C]	48
Recommended screen material	depending on color and design
Recommended pasting ratio	depending on the density of the used color
Drying	by means of solvent evaporation
Drying figures TZ according to Mettler	TZ 10: 120 ; TZ 100: 1150
Recommended working temp. [°C]	20 - 25
Recommended rel. humidity [%]	55 - 60
Recommended Covercoats	can be overprinted with all FERRO covercoats
Thinner	80 4086
Cleaner	80 452

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