Roller coating
BrazeLet® Ni7R-8501

Alloy Application BrazeLet Ni7

Naming	*Ni 710 according to ISO 17672 BNi-7 according to ANSI/ AWS A5.8*
Composition	*B-Ni76CrP according to ISO 17672 and ANSI/AWS A5.8*
Melting temperature	*890°C (1634°F)*
Min. brazing temperature	*980°C (1796°F)*
Impurities	*According to ISO 17682 and ANSI/AWS A5.8*

The nickel (Ni) based brazing alloy **BrazeLet Ni7** is a low-melting, eutectic brazing alloy suitable for brazing in vacuum or protective atmosphere. It is suitable for brazing thin-walled assemblies due to its free-flowing ability, and provides good oxidation and corrosion resistance at elevated temperatures. It is typically used for tube-fin heat exchangers or applications where the base material is sensitive to higher brazing temperatures.

As **BrazeLet Ni7** is sensitive to gap thickness, it is recommended that gaps do not exceed 30 µm. Wider gaps risk the formation of a crack-sensitive brittle centre line.

Paste Application Roller Coating

Metal content	*85%*
Powder size	*<63µm*
Typical density	*3.4 g/cm³*
Flash point of solvent	*>100°C (212°F)*
Recommended drying	*120-170°C (248-338°F)*
Evaporation temperature of binder	*Approx. 350-450°C (662-842°F)*
Cleaning	*Aliphatic solvents*
Shelf life	*12 months in cans, 6 months in cartridges*
Storage	*Origin closed at 4 to 30°C (39-86°F)*
Typical Viscosity, Brookfield T-spindle C with Helipath, Speed 2.5 rpm, 20°C (70°F)	*90 Pas*

The brazing paste **BrazeLet Ni7R-8501** can be used for roller coating fins or structured plates, typically found in flat heat exchanger designs. Depending on the type of roller used, the paste can be applied with thin layers either on top or on the side of the fin tips. Gap size between paste roll and scraper of 0.08 to 0.12 mm is recommended. The amount of paste is controlled by weight and is a function of the fins or structured plate design. **BrazeLet Ni7R-8501** properties allow reliable application in a wide range of coating speeds, tested up to 20m/min. The solvent based paste ensures reliable coating over time without drying on the roll. It has no settlement and no stirring is needed in the equipment. However, when opening a can from stock it is always recommended to stir the paste.

The coated fins can be dried with standard drying process (hot air) at 120°C-170°C. Here, the drying time depends on thermal mass, parts design and the used furnace and thus needs to be established. When dried, the paste has excellent adhesion to the metal sheet.

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Customer support is provided every step of the way. We are deeply involved with you prior to delivery, offering expert advice to ensure an optimum solution. The Höganäs tech centres are well equipped to support all kinds of trials for roller coating applications and the parameters can be targeted at customers' process. We can provide test series of components with paste applied the same way as in final production in order to make sure the customers' productivity and quality requirements are fulfilled.