Roller coating
BrazeLet® Ni613R-8501

Alloy Application BrazeLet Ni613

Naming	*BrazeLet Ni613*
Composition	*B-Ni60CrPSi*
Melting temperature	*970-1030°C (1778-1886°F)*
Min. brazing temperature	*1090°C (1994°F)*
Impurities	*According to ISO 17672 and ANSI/AWS A5.8*

BrazeLet Ni613, a nickel (Ni) based brazing alloy, features a best in class wetting behaviour on stainless steel material in vacuum or protective atmosphere. Its high level of alloyed chromium (Cr) results in a superior hot gas and acid corrosion resistance. The brazing alloy is best suited for brazing heat exchangers such as exhaust gas recirculation (EGR) cooler in automotive or tap water applications in home or industry.

Unlike the standardised Ni-based alloys, **BrazeLet Ni613** is able to fill gap sizes of <0.05 mm to 0.2 mm without brittle phase lines or cracks. The resulting micro hardness of the brazing area is less than half of a Ni650 brazing gap. This leads to a more reliable and safe brazing.

Paste Application Roller Coating

Metal content	*85%*
Powder size	*<63 µm*
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 / 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 Ni613R-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 Ni613R-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 the standard drying process (hot air) at 120°C-170°C. The drying time depends on thermal mass, parts design and the used furnace and thus needs to be established. After drying, 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.