



Dispensing **BrazeLet® Ni5DW-9003**

Alloy Application BrazeLet BNi5

Naming	Ni 650 according to ISO 17672 BNi-5 according to ANSI/ AWS A5.8
Composition	B-Ni71CrSi according to ISO 17672 and ANSI/AWS A5.8
Melting temperature	1080-1135°C (1976-2075°F)
Min. brazing temperature	1150°C (2102°F)
Impurities	According to ISO 17682 and ANSI/AWS A5.8

Paste Application Dispensing

Metal content	90%
Powder size	<106µm
Typical density	4.4 g/cm³
Flash point of solvent	-
Recommended drying	100-170°C (212-338°F)
Evaporation temperature of binder	Approx. 300-400°C (572-752°F)
Cleaning	Water
Shelf life	12 months / 6 months in cartridges
Storage	Origin closed at 4 to 30°C (39-86°F)
Typical Viscosity, Brookfield T-spindle D with Hellpath, Speed 2.5 rpm, 20°C (70°F)	300 Pas

The nickel (Ni) based brazing alloy **BrazeLet BNi5** is suitable for brazing stainless steel or super alloy materials in vacuum or protective atmosphere. It provides excellent high temperature strength, oxidation and corrosion resistance, making it a good choice for applications such as catalytic converters, heat exchangers and gas turbines. It is suitable for thin-walled components due to limited dissolution of the base material.

As **BrazeLet BNi5** is sensitive to gap thickness, it is recommended that gaps do not exceed 50 µm. Wider gaps risk the formation of a crack-sensitive brittle centre line. A diffusion heat treatment can be considered to dissolve the brittle silicides for larger gap clearances up to 100 µm.

The brazing paste **BrazeLet Ni5DW-9003** can be used for dispensing applications, typically found on heat exchanger inlet and outlet tubes, housing to core joints and hole plate to tube joints. It can be dispensed by using standard air pressure dispensing units. For better precision, screw dispense units are recommended. The paste sticks on all bevel and vertical positions without the need of pre-drying but is easily removed using water.

BrazeLet Ni5DW-9003 properties allow reliable application in a wide speed range as a result of the dispensing equipment / automation as well as the needle diameter. The paste can be delivered in cartridges for use in automated applications or different sized cans for refilling of smaller cartridges for manual applications. For best performance, it is recommended to first stir the paste.