

## Dispensing BrazeLet® Ni5DW-9201

## **Alloy Application BrazeLet Ni5**

| Naming                   | Ni 650 according to ISO 17672<br>BNi-5 according to ANSI/<br>AWS A5.8 |
|--------------------------|---|
| Composition              | B-Ni71CrSi according to<br>ISO 17672 and ANSI/AWS<br>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                              |

The nickel (Ni) based brazing alloy **BrazeLet Ni5** 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 Ni5** 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.

## **Paste Application Dispensing**

| Metal content  | 92%                                     |
|--|---|
| Powder size  | <106µm                                  |
| Typical density  | 4.6 g/cm <sup>3</sup>                   |
| Flash point of solvent   | >75°C (>167°F)                          |
| Recommended drying   | 120-150°C (248-302°F)                   |
| Evaporation temperature of binder  | Approx. 300-400°C<br>(572-752°F)        |
| Cleaning   | Water                                   |
| Shelf life   | 12 months in cans                       |
| Storage  | Origin closed at 4 to 30°C<br>(39-86°F) |
| Typical Viscosity,<br>Brookfield T-spindle E<br>with Helipath, Speed<br>2.5 rpm, 20°C (70°F) | Approx. 1000 Pas                        |

The brazing paste **BrazeLet Ni5DW-9201** 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-9201** properties allow reliable application in a wide speed range as a result of the dispensing equipment / automatisation as well as the needle diameter. The paste can be delivered in 4 kg 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.

