

## Dispensing BrazeLet® F300DW-9007

## Alloy application BrazeLet F300-20

Naming	BrazeLet F300-20
Composition	B-Fe42CrNiPCuSi
Melting temperature	1025–1060 °C (1877–1940 °F)
Min. brazing temperature	1100 °C (2012 °F)
Impurities	According to ISO 17672 and ANSI/AWS A5.8

## Paste application dispensing

Metal content	90%
Powder size	<106 µm
Typical density	4.5 g/cm³
Recommended drying	RT-150 °C (RT-302 °F)
Evaporation temperature of binder	Approx. 250–300 °C (482–572 °F)
Cleaning	Water
Shelf life	12 months
Storage	Origin closed at -20–35 °C (-4–95 °F). In cartridges 4–35 °C (39–95 °F)
Typical Viscosity, Brookfield T-spindle E with Helipath, Speed 2.5 rpm, 20 °C (70 °F)	1000 Pas

**BrazeLet F300-20**, a stainless 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 of heat exchangers, stainless oil coolers for commercial vehicles, exhaust gas recirculation (EGR) coolers in automotive or tap water applications in household or industry.

Unlike the standardised nickel (Ni) based alloys, **BrazeLet F300-20** 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 as well as more flexibility in part tolerances.

The water-based brazing paste **BrazeLet F300DW-9007** 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. The paste dries quickly, sticks to all bevel and vertical positions without the need for pre-drying. **BrazeLet F300DW-9007** can be easily removed with water. It has a very low polymer content. The flux-free binder is specially designed to decompose cleanly at low temperatures. In this way furnace maintenance is minimized, while preventing pre-oxidation of the F300 powder in trivial furnace atmospheres.

**BrazeLet F300DW-9007** achieves extremely good residue-free brazing results in both vacuum and continuous belt furnace brazing. Its 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 cartridges for use in automated applications or different sized cans. It can be frozen and brought back to room temperature for use without any damage to its properties.



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.