



## Spraying **BrazeLet® F300S-8701**

### Alloy Application BrazeLet F300

Naming	BrazeLet F300
Standard composition	B-Fe39CrNiCuPSi accor
Melting range	1000-1070°C (1832-1958°F)
Min. brazing temperature	1100°C (2012°F)
Impurities	According to ISO 17672 and ANSI/AWS A5.8

### Paste Application Dispensing

Metal content	87%
Powder size	<63µm
Typical density	3,6g/cm³
Flash point of solvent	>100°C (>210°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 can or buckets / 6 months in cartridge
Storage	Origin closed at 4 to 30°C (39-86°F)
Typical Viscosity, Brookfield T-spindle B with Helipath, Speed 2.5 rpm, 20°C (70°F)	25 Pas

**BrazeLet F300**, a stainless based brazing alloy, features a best in class wetting behavior on stainless steel materials in vacuum or protective atmospheres. 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 standardized nickel (Ni)-based alloys, **BrazeLet F300** is able to fill gap sizes of <0.05 mm to 0.2 mm without brittle phase lines or cracks. The resulting microhardness of the brazing area is less than half of a Ni650 brazing gap. This results in a more reliable and safe brazing as well as more flexibility in part tolerances.

Spraying provides the biggest versatility and flexibility of all brazing filler application methods. It can coat any surface with virtually any thickness, and thus can do the job of other paste application techniques. Compared to other methods, it offers advantages like lower investment, higher application speed, easier drying and less shrinkage of the workpiece during brazing, and in some cases, even paste savings. It also allows you to evaluate and design your future roller coating and screen printing processes, if you are planning to adopt those.

The solvent-based paste **BrazeLet F300S-8701** can be used for spraying structured plates, typically found in flat heat exchanger designs. It ensures reliable coating over time without drying the spraying nozzles. **BrazeLet F300S-8701** has no settlements and no stirring is needed in the equipment. However, when opening a can from stock it is always recommended to stir the paste. The sprayed parts can be dried with standard drying process (hot air) at 120–170 °C. Here, the drying time depends on thermal mass, parts design and the used furnace and thus needs to be established on a case-by-case basis. After drying, the paste has excellent adhesion to the metal sheet.