



SUPERIOR SOLDER PASTE AL26-103-25



DIRECT ALUMINUM SOLDERPASTE USING SN100C

- Solders directly to aluminum to create a solder coat on aluminum surfaces making it solderable.
- At 25% metal, this is a tinning paste for solder spreading on to the aluminum surface.
- Eliminating the need for plating aluminum before soldering.
- Works best when used in conjunction with the nonhazardous **Superior Aluminum Cleaner**.
- Used to make 1XXX, 2XXX, 3XXX, 5XXX, 6XXX, and 8XXX series aluminum solderable.
- Offers the excellent thermal and electrical properties of the SN100C solder (Tin-Copper with trace of Nickel and Germanium alloy).

DESCRIPTION

Superior Solder Paste AL26-103-25 is a water-soluble formulation designed for direct aluminum solders paste tinning of aluminum surfaces of nearly all aluminum alloys except those high in silicon. It also has excellent soldering characteristics for copper and nickel-plated aluminum surfaces. This unique chemistry and mixture gives the maximum solder flow on the widest variety aluminum alloys. There is not enough metal in this specialized paste to make a traditional joint connection but enough to coat the aluminum surface and make it solderable.

APPLICATION

Superior Solder Paste AL26-103-25 is made from Type 3 Powder (-325/+500 Mesh Powder) with a unique flux binding system to keep the very active aluminum flux portion of the flux from degrading the solder powder. The material should be refrigerated before use and when in storage. The temperature for printing and dispensing the paste is 20 . 23°C; relative humidity of 35-55%.

DIRECTIONS

- ➊ The **Superior Aluminum Cleaner** should be used on the aluminum surface to remove surface oxides. The part needs to be then rinsed counter-flowing cold water rinses then dried.
- ➋ **Superior Solder Paste AL26-103-25** is normally via flat printing pattern to flat surfaces or syringe application on non-flat surfaces.
- ➌ Parts are passed through the reflow oven matching the necessary reflow pattern for the thermal mass of the part being soldered.
- ➍ Cleaning of the soldered part should be done in-line with hot water rinse or hot Superior Aluminum Cleaner followed by counter-flowing cold water rinses then drying

Superior manufactures quality fluxes. Our business is solving problems.

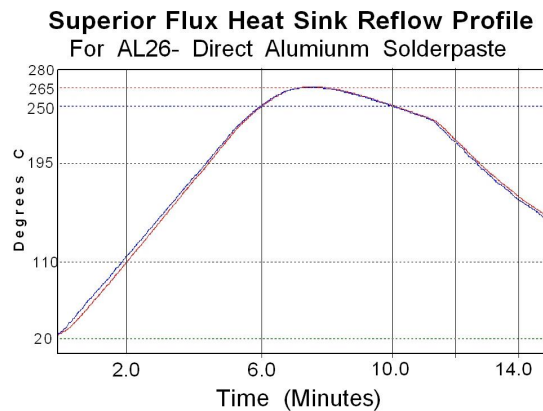


PHYSICAL PROPERTIES

Density @ 20°C (68°F)	2.50 grams/liter
Viscosity @ 20°C (68°F)	300,000-500,000 cps
Recommended Soldering Range	230° - 290°C
Alloy Melting Point	227°C
Odor	Mild
Flash Point	None
Freezing Point	None

USAGE and STORAGE

Superior Solder Paste AL26-103-25 is a water soluble paste formulation. All equipment in contact with the solder paste can be cleaned with water (followed by alcohol rinsing if rapid drying is needed). The profile (depending on thermal mass) should reach max temp of about 280°C within 8 min. After 8 minutes of heating the flux chemistry will degrade.



Superior Solder Paste AL26-103-25 should be stored with consideration of the effect that storage will have on the long term stability of the paste

- To achieve a shelf life of 12-24 months, store in a freezer below 0°C.
- To achieve a shelf life of 6-12 months, store in a refrigerator, 1-12°C.
- For non-refrigerated/frozen storage, maintain in a cool and dry location. Maximum temperature should not exceed 23°C. A storage time of up to 6 months can be expected.
- Avoid direct sunlight.

SAFETY PRECAUTIONS

Superior Solder Paste AL26-103-25 attacks many metals to some extent, it is recommended that polyethylene, PVC or fiberglass reinforced polyester containers be used. Avoid skin contact and/or breathing vapors. Wear gloves and eye protection. This product, during handling or use, may be hazardous to health or the environment. Read the Material Safety Data Sheet and warning label before using this product.

The information contained herein is based on data considered to be accurate and is intended for use by persons having technical skills at their own discretion and risk. Since conditions of use are outside of Superior Flux & Mfg. Co.'s control, we cannot assume liability for results obtained or damage incurred due to misuse, nor can we assume customer liability.

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