

SUPERIOR NO. 1250



CONTROLLED ATMOSPHERE ALUMINUM BRAZING FLUX

- A salt which is applied via water slurry on silicon-aluminum clad aluminum surfaces.
- For use in nitrogen controlled atmosphere aluminum brazing oven.
- ➤ At brazing temperatures will break up tenacious aluminum surface oxides.
- > Will promote the proper flow of clad aluminum alloy to make connection to other clad surfaces.
- ➤ At room temperatures the aluminum brazing flux is not water soluble.
- > Can be used for the no-clean brazing of silicon-aluminum clad heat exchanger assemblies.
- > Can also be provided as a dispensable flux paste or as a metal-loaded brazing paste.

DESCRIPTION

Superior No. 1250 is a floroalumiunate-based, inorganic type flux salt. The **Superior No. 1250** fluxing ingredients are designed to activate at the high brazing temperatures of silicon-aluminum clad alloy in a nitrogen controlled atmosphere brazing oven. At brazing temperatures **Superior No. 1250** will break up tenacious aluminum surface oxides and will promote the proper flow of clad aluminum alloy to make connection to other clad surfaces. The **Superior No. 1250** is not a water soluble product.

APPLICATIONS

Superior No. 1250 brazing salts are typically applied by making a 15-30% water slurry (depending on flux concentrated needed) that are then sprayed on to the silicon-aluminum clad aluminum surfaces. Most controlled atmosphere silicon-aluminum clad furnaces will have a preliminary drying oven to remove the water carrier. The brazing oven works under near 100% nitrogen to heat the parts to 580-610 ℃ to activate the flux which will break any surface oxides and promote the flow of the silicon-aluminum clad surface to bond to other clad aluminum surfaces. The assemblies made with this product are considered to be no-clean, meaning no additional cleaning is normally needed. In the event that customer requirements require removal of the un-reacted salts a simple power flush of the unit will remove the flux salts.

PHYSICAL PROPERTIES

Form Powder Color White 2.8 g/cm³ **Bulk Density** Water Content Less than 1% Active Temperature Range 580-610°C

THIS PRODUCT IS ROHS COMPLIANT

PREPARATION and HANDLING

Superior No. 1250 is shipped as solid concentrated salt crystals that can be diluted up to 15% by weight. For greater strength, lower dilution ratios should be used. Since the salts are not soluble, constant mixing must be done to prevent separation.

SAFETY PRECAUTIONS

While Superior No. 1250 is not water soluble, as with nearly all chemical products direct contact to the skin should be avoided by the use of plastic gloves and goggles.

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.

