

FUSION INCORPORATED

4658 E. 355th St. Willoughby, OH 44094 • Phone (440) 946-3300 • (800) 626-9501 Fax (440) 942-9083 • Web: www.fusion-inc.com • e-mail: info@fusion-inc.com

TECHNICAL BULLETIN Shelf Life of Solder and Brazing Paste

Due to the many variables that affect the physical and chemical properties of brazing/soldering pastes, as well as the diversity of Fusion's specially formulated paste products, "shelf life" is difficult to define. Many products, if stored properly, will last years with little to no performance differences, while others may be more susceptible to aging, which mostly impacts the dispensing properties. Fusion Incorporated products are generally formulated to have a recommended shelf life of three months when packaged in cartridges and six months when packaged in jars (plastic, metal, or glass); however, please consult the appropriate product Technical Data Sheet (TDS) or contact Technical Services for specific questions about product shelf life and proper storage conditions.

Fusion's Brazing/Soldering pastes are a metal alloy powder suspended in a binder/flux component - temperature is usually the most common environmental factor impacting its integrity. Excess heat can cause alloy to settle, evaporate volatile components, break binder emulsions, or even initiate unwanted chemical reactions prior to product use. Deep freezing of certain aqueous systems can occasionally break the emulsion which can also impact dispensing characteristics. As such, transportation and storage conditions are critical to ensure the integrity of the product.

Should the shelf life be exceeded while properly stored, the paste should be periodically rechecked by the customer for dispensing and brazing properties. If the product dispenses properly and clearly works in the customers existing process (brazes/solders to the parts, continues to meet customers end performance requirements, etc.), the shelf life may be extended up to 12 months from the date of manufacture.

If the brazed/soldered joint meets the customers' end use performance requirements but the product becomes difficult to dispense, customers may contact their sales representative, or Fusion's Quality department, who can assess whether Fusion may be able to rework the product to improve dispensing characteristics while maintaining the braze/solder properties. This work would be completed at a nominal cost. Fusion <u>does not</u> recommend consumers reworking the material.

To maximize the paste shelf life, Fusion Incorporate recommends following the general storage and handling practices outlined in MDG-308, as well as any product specific information in the appropriate Technical Data Sheet (TDS).

As always, should there be any questions, concerns, or should Fusion be of further assistance, please contact Fusion's Technical Service Department.