LucasMilhaupt®
A Handy & Harman Company
Global Brazing Solutions®

Technical Data Sheet

LTB3900SSKNC and LTB3941SSKNC

NOMINAL COMPOSITION

Aluminum	Remainder
Silicon	12.0% ± 1.0%
Other Elements (Each)	0.05% Max
Other Elements (Total)	0.15% Max

PHYSICAL PROPERTIES

Color	Grayish-White
Melting Point (Solidus)	1070°F (577°C)
Flow Point (Liquidus)	1080°F (582°C)
Brazing Range	1080°F - 1120°F (582°C - 604°C)
Specific Gravity(1)	2.66
Density (Lbs/in^3) (1)	0.096

(1) Metal Only

PRODUCT USES

LTB3900SSKNC and LTB3941SSKNC pastes are a stable mixture of aluminum silicon filler metal and NOCOLOK® flux, a non-corrosive flux for aluminum brazing. The pastes can be used in controlled atmosphere furnace, torch, or induction brazing processes for joining a wide variety of aluminum alloys. No post braze cleaning operations are required. The flux and its residues are non-hygroscopic and non-corrosive.

LTB3900SSKNC– The least viscous of the group of braze pastes. LTB3900SSKNC can be used in joints containing very tight clearance due to its cold slump characteristics. The paste can seep deep into crevices prior to brazing. This pre flow characteristic allows capillary action to mot have to flow as far to fill the joint.

LTB3941SSKNC– The most viscous of these braze pastes. It is also the only one of the pastes that can suspend itself long enough without separating to be used in dispensable applications.

PROPERTIES OF BRAZED JOINTS

The properties of a brazed joint are dependent upon numerous factors including base metal properties, joint design, metallurgical interaction between the base metal and the filler metal. Joint clearances of 0.003 - 0.006 in (0.076 - 0.152 mm) per side are optimum for achieving highest joint strength. Joints with increased clearances can still produce adequate joint strengths depending on final operating conditions.

If necessary, stir before using to insure proper consistency. These brazing pastes can be thinned with alcohol.

Lucas-Milhaupt, Inc. • 5656 S. Pennsylvania Ave • Cudahy, WI 53110 • Phone: 414.769.6000 • Fax: 414.769.1093 • www.lucasmilhaupt.com

PROPERTIES OF BRAZED JOINTS (CONT)

The optimum filler metal to flux ratio depends on brazing atmosphere and heating rate. Lucas-Milhaupt, Inc. will blend special mixes to each customer's unique brazing operation.

POST CLEANING

LTB3900SSKNC and LTB3941SSKNC contain a noncorrosive flux and require no post braze cleaning operation; however, if it is desired to remove the residue, a 50/50 mixture of nitric acid and distilled water will remove residue. Agitate the part in the solution for 30 seconds to remove all flux.

WARRANTY & STORAGE

Lucas-Milhaupt, Inc. warrants their Brazing and Soldering Paste products for 90 days from the date of shipment if stored in the original unopened container. Optimal storage conditions would be 65°F (18°C) - 75°F (24°C), clean and dry. It is recommended that the paste products are stored away from direct heat. Paste may require mixing to regain a homogenous mixture before application.

The 90 day warranty should not be interpreted as the shelf or useful life of the product. The paste products may be used well beyond the 90 day warranty, unless customer testing or production results indicate unsatisfactory performance of the product.

AVAILABLE PACKAGING

LTB3900SSKNC and LTB3941SSKNC aluminum brazing pastes are available in various size syringes, jars and cartridges.

SPECIFICATIONS

Aluminum powder chemistry is manufactured in accordance to the following specifications:

- Aluminum Association (AA) 4047
- American Welding Society (AWS) A5.8/A5.8M BAlSi-4
- Aerospace Material Specification (AMS) 4185

APPLICABLE PRODUCT CODE(S)

The applicable Lucas-Milhaupt product code(s) for this technical data sheet:

LTB3900SSKNC: 84-362
LTB3941SSKNC: 82-131/62-718/41A1.

SAFETY INFORMATION

The operation and maintenance of brazing equipment or facility should conform to the provisions of American National Standard (ANSI) Z49.1, "Safety in Welding and Cutting". For more complete information refer to the Material Safety Data Sheet for LTB3900SSKNC and LTB3941SSKNC.

Lucas-Milhaupt, Inc. • 5656 S. Pennsylvania Ave • Cudahy, WI 53110 • Phone: 414.769.6000 • Fax: 414.769.1093 • www.lucasmilhaupt.com

WARRANTY CLAUSE

Lucas-Milhaupt, Inc. believes the information contained herein to be reliable. However, the information is given by Lucas-Milhaupt, Inc. without charge and the user shall use such information at its own discretion and risk. This information is provided on an "AS IS" AND "AS AVAILABLE" basis and Lucas-Milhaupt, Inc. specifically disclaims warranties of any kind, either express or implied, including, but not limited to, warranties of title or implied warranties of merchantability or fitness for a particular purpose. No oral advice or written or electronically delivered information given by Lucas-Milhaupt, Inc. or any of its officers, directors, employees, or agents shall create any warranty. Lucas-Milhaupt, Inc. assumes no responsibility for results obtained or damages incurred from the use of such information in whole or in part.

Lucas-Milhaupt, Inc. • 5656 S. Pennsylvania Ave • Cudahy, WI 53110 • Phone: 414.769.6000 • Fax: 414.769.1093 • www.lucasmilhaupt.com