



Creative Materials, Inc.  
12 Willow Road  
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## 125-19FS

### FLEXIBLE HIGH TEMPERATURE ELECTRICALLY CONDUCTIVE INK

#### DESCRIPTION

125-19FS is a flexible, re-workable, electrically conductive, silicone-based ink. The overall balance of peel strength, cohesion, printability and high temperature holding power provides a versatility that makes this product useful in a wide range of coating, printing, fastening and bonding applications. This product is very resistant to flexing and creasing. Some applications for 125-19FS include, but are not limited to, emi/rfi shielding of polyimide flexible circuits, polymer thick film circuitry, and electrical attachments for stress sensitive devices. 125-19FS is one of the few conductive inks that can bond/adhere to silicone substrates and surfaces. In addition, it can be bonded to some types of Teflon® surfaces and rubber surfaces.

125-19FS is optimized for screen-printing but can also be syringe dispensed, dipped and sprayed. The last two methods require dilution.

#### UNIQUE FEATURES

- \* Excellent Bonding to Difficult Surfaces
- \* Wide Range of Applications
- \* High Temperature Resistance
- \* Screen Printable

#### TYPICAL UNCURED PROPERTIES

Viscosity (cps)	16,000 – 20,000
Filler	Silver
Percent Silver (cured)	> 84
Specific Gravity (water=1)	2.68

#### TYPICAL CURED PROPERTIES

Crease Resistance	Excellent
Sheet Resistance ( $\Omega$ /sq/mil, MAX)	0.05
Solderable	No
Hydrolytic Stability	Excellent
Useful Temperature Range (°C)	-70 to +260
Thermal Stability (°C)	Good to +325
Thermal Conductivity (W/mK)	5.2

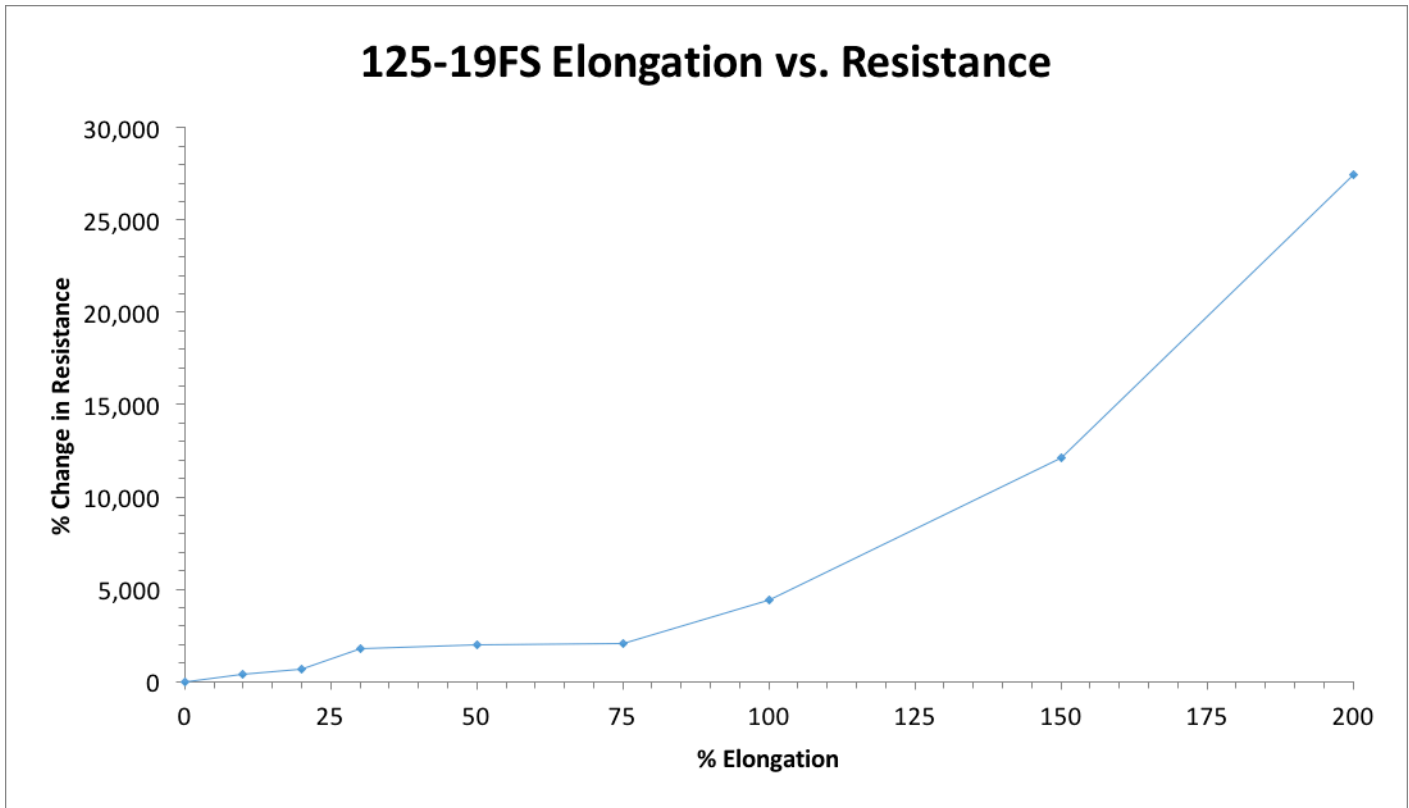
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#### **SUGGESTED HANDLING & CURING**

125-19FS is ready to use as supplied. Further thinning may be accomplished by adding small amounts of CMI 127-05 or Xylene. Prior to using, be certain to re-suspend silver. Good properties are achieved when cured for 30 minutes at 150°C but end user is advised to experimentally determine temperature and time best suited for individual applications. Add 1-2% B507 catalyst when maximum strength and chemical resistance is needed.

#### **STORAGE**

Shelf life: < 2 weeks at 25°C; or 6 months at 5°C; or 12 months at -10°C.

#### **SAFETY & HANDLING:**

Contains flammable solvents. Use with adequate ventilation. Keep away from sparks and open flames. Avoid prolonged contact with skin and breathing of vapors. Wash with soap and water to remove from skin.

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