

Creative Materials, Inc.
12 Willow Road
Ayer, MA 01432T 978.391.4700
F 978.391.4705**102-32NFC****FLEXIBLE HIGH TEMPERATURE ELECTRICALLY CONDUCTIVE ADHESIVE**

DESCRIPTION: 102-32NFC is a flexible electrically conductive silicone adhesive. 102-32NFC features the highest degree of thermal and mechanical reliability over any other conductive adhesive technology and provides no failures during thermal cycling, heat aging, shocking or vibration due to the reliability from the elasticity of the product. Some applications for 102-32NFC include, but are not limited to, elastomeric conductive bridging and bonding, conductive bonding of low surface energy materials, conductive via filling and electrical attachments for stress sensitive devices. 102-32NFC is one of the few conductive adhesives that can bond to silicone substrates and surfaces. 102-32NFC is a non-flammable version of 102-32.

TYPICAL CURED PROPERTIES:

Viscosity (cps)	30,000
Filler	Silver
Percent Silver (cured)	> 78
Volume Resistance (Ω -cm, MAX)	0.0001
Thermal Conductivity (W/m-K)	5.4
Crease Resistance	Excellent
Young's Modulus (MPa)	1,700
Tensile Strength (MPa)	> 5
Hardness (Shore A)	~55
Tear Strength (N/m)	12,500
Useful Temperature Range ($^{\circ}$ C)	-70 to +260
Thermal Stability ($^{\circ}$ C)	Good to +325

SUGGESTED HANDLING: Before using 102-32NFC should be stirred gently to ensure homogeneity. Further thinning may be accomplished by adding small amounts of toluene, xylene, or 127-05.

SUGGESTED CURING AND BONDING: Apply thin film of adhesive to both surfaces to be bonded. Good properties are achieved when cured for 60 minutes at 150 $^{\circ}$ C but end user is advised to experimentally determine temperature and time best suited for individual applications. 102-32NFC is not recommended for applications that cannot cure above 100 $^{\circ}$ C.

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STORAGE: Shelf life: up to 2 weeks at 25 $^{\circ}$ C; or 6 months at 5 $^{\circ}$ C; or 12 months at -20 $^{\circ}$ C. See [syringe handling guidelines](#) for recommendations on storage and maintaining homogeneity of material over long-term storage.
***102-32NFC packaged in syringes must be kept frozen at -40 $^{\circ}$ C**

SAFETY & HANDLING: 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.

All technical information is based on data obtained by CMI personnel and is believed to be reliable. No warranty is either expressed or implied with respect to suitability in a particular application or possible infringements on patents.

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