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127-30

OPTOMEK PRINTABLE, ELECTRICALLY CONDUCTIVE, STRETCHABLE INK

DESCRIPTION: 127-30 is a single component, silver filled, Optomek printable, electrically conductive, stretchable ink. 127-30 provides for fine pitch resolution, when aerosol jet dispensed. This system features excellent thermal stability, outstanding chemical resistance and excellent high temperature properties. 127-30 is ideal for applications which require adhesion to difficult to adhere to substrates, or a high degree of flexibility or elongation. 127-30 provides excellent adhesion to silicone substrates.

TYPICAL SPRAY PARAMETERS:

Viscosity (cps)	250
Nozzle diameter (um)	250-350
Atomizing Pressure (SCCM)	1700-2000

TYPICAL CURED PROPERTIES:

Filler	Silver
Percent Silver, cured	87
Crease Resistance	Excellent
Volume Resistivity (Ω -cm)	0.001
Sheet Resistivity (Ω /sq/mil)	0.4
Hydrolytic Stability	Excellent
Useful Temperature Range ($^{\circ}$ C)	-55 to +250
Thermal Stability ($^{\circ}$ C)	Good to +325
Wet Coverage (in ² /gm/mil)	23.0
Specific Gravity	2.68

SUGGESTED HANDLING AND CURING: 127-30 is ready to use as supplied. Further thinning may be accomplished by adding small amounts of thinner 127-05. Prior to using, be certain to resuspend silver. Best properties, for most applications, result when cured for several minutes at 170 $^{\circ}$ C to 180 $^{\circ}$ C. Good properties are obtained on a variety of substrates by dry and curing at temperatures ranging from 50 $^{\circ}$ C to 200 $^{\circ}$ C. For best adhesion, it is recommended to add B-507 catalyst at 1-2% by weight. End user is advised to experimentally determine temperature and time best suited for individual applications.

STORAGE: Shelf Life: 3 months at 25 $^{\circ}$ C or 12 months at -40 $^{\circ}$ C.

SAFETY AND 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 results or possible infringements on patents.

REVISION DATE: 02/23/17 REVISION: A