



## TECHNICAL DATA SHEET

### SHIELDING SOLUTIONS ECC-NCS001 CONDUCTIVE CAULK / SEALANT MATERIAL

#### Product overview

ECC-NCS001 is an electrically conductive composite material comprising of silicone elastomer and nickel-plated graphite particles. It is designed to be easily applied to panel joints / seams and or the small clearances that result from non-continuous mechanical fixing in sheet metal enclosures. On application it cures at room temperature to form an elastomeric section / joint that has good adhesion to most commonly used metals / substrates. When fully cured it will prevent water ingress and improve the EMI shielding performance of panel joints / overlaps.

ECC-NCS001 has excellent high temperature resistance and long-term ageing characteristics. The nickel-graphite filler used in this material is very resistant to corrosion and has good galvanic compatibility with commonly used materials such as aluminium alloys.

#### Uncured Properties

Colour	Dark grey
Form	Thixotropic paste
Cure time (approx 4mm section)	12 hours



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Cured Properties	
Density	2.2gcm <sup>-3</sup>
Hardness	60 Shore A
Volume resistivity	<0.5Ω.cm
Adhesion	>100 Ncm <sup>-2</sup>
Attenuation – 100MHz to 10GHz (MIL-STD 285)	70 – 110dB (typically)
Elongation	100%
Service temperature range	-55°C to 150°C

### Packaging

ECC-NCS001 is normally supplied in 6 fl.oz (170ml) Semco cartridges from which it can be directly applied using a suitable caulking gun.

### Storage

It is recommended that when not in use that the material is stored in a cool dark, dry place. If the facility exists then some form of refrigerated or freezer storage is ideal. If kept properly sealed and in a suitable location then the material will remain usable for up to 6 weeks.



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#### Handling

When using this material observe usual standards of industrial hygiene/practice. Avoid skin/eye contact and work in a well ventilated area. For more detailed information please refer to the MSDS (Material Safety Data Sheet)



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