



# ElectroBond™

For Optimized Electrosurgical Device Performance

Surface Enhancement Experts

## Coating Data Sheet

**Description:** ElectroBond™ is a specially formulated coating for high-temperature, nonstick applications. It allows electrosurgical cutting devices to work more efficiently and consistently. ElectroBond is an extremely durable, black, smooth, low friction surface that permanently bonds to metal surfaces including 300 and 400 series stainless steel. The raw materials and resin systems are listed in the Code of Federal Regulations, Title 21, Food and Drugs, Parts 175 and 177 for materials suitable for food contact.

### Features and Properties:

- Extremely hard surface (4H pencil hardness) with excellent eschar release
- No porosity provides controlled cutting with virtually no uncontrolled sparking
- More damage resistant than any PTFE or silicone electrosurgical coating on existing blades
- High temperature resistant; 700° F continuous and 840° F short term stability
- Will not thermally decompose during use and does not develop hot spots
- Is a tough, yet resilient, coating developed from an epoxy/silicone composite
- Most physically durable and damage resistant electrosurgical coating available
- Certified formulations available containing no PTFE or PFOA
- No C5 or phosgene effluent or coating decomposition smoke
- Withstands gamma radiation sterilization with no change in performance; 110kgy for verification; 25~50kgy in production
- Successfully bonded to blades, needles, wires, balls, probes, and more
- Bonds to any metal surface on both mono-polar and bi-polar devices

### Electrical Properties and Custom Formulations:

- Several formulations available from highly conductive to highly insulative
- Low power setting/high conductivity formulations available for low power starting
- Limited custom colors available by special order

### Selective Coating Thickness and Application Details of Edge & Tip Optimization:

- Low starting power requirement formulations and application are available for delicate procedures
- Can be deposited at variable thickness options for optimum performance
- Bonded coating thickness available from .0003" to .003" per surface
- Areas of coating application precisely deposited. Tip/Edge thin or clean areas available

### Dry Film Properties:

- Color/ Hardness: Black / 4H pencil hardness
- Dry Film Thickness: .0003" to .003" / .7 to 75 microns
- Gloss: 20-30% at 60°

Information presented in this product data sheet is considered reliable, but conditions and methods of use, which are beyond our control, may modify results. Before adopting our products for commercial use, the user should confirm their suitability. In no case should recommendations or suggestions for the use of our products be understood to sanction violation of any patent. Technical support available for filing 510K submissions for device certification. Complete formulation and composition analysis available for device certification only.

Patented under US patents, Patented under US patents, 7,60,297; 7,390,326; 7,288,091; 7,147,634 and other US and Foreign patents pending and other US and Foreign patents pending. ElectroBond™ is a US Registered trademark of Innovatech, LLC, which used under license by Surface Solutions Group, LLC.



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