



Every medical device we coat touches lives®

# ElectroBond

For Optimized Electrosurgical Device Performance

## Coating Data Sheet

### Description:

ElectroBond is a specifically 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 coating 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; 100kgy for verification; 25~kgy 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 insulated
- Low power setting / high conductivity formulations available for low power settings
- Limited custom colors available by special order

### Selective Coating Thickness; 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" or 7 to 75 microns
- Gloss: 20-30% at 60°

The information contained in this coating data sheet is based on our application of and work with these coatings. End use conditions and methods of use with these coatings which are beyond our control may modify these results. Before adopting our coatings for commercial use, the user should test and confirm the suitability of these coatings for each specific use. Additionally, our recommendations and suggestions for the application and use of our coatings are not a warranty that such application or use are free from infringement of any third party patent right. Technical support available for filing 510K submissions for device certification. Complete formation and composition analysis available for certification only. ElectroBond is patented under US Patent Nos. 7,147,634; 8,814,861; 8,814,863; 9,630,206, and other US and Foreign patents pending. ElectroBond is a registered trademark of Innovatech, LLC which is used under license by Surface Solutions Group, LLC.



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