TECHNICAL DATA SHEET

High-tek coating DG4

General notes:

- This coating is a multi-layer system where there is a DLC taC layer to guarantee a good level of hardness and abrasion resistance and excellent corrosion resistance. In particular, this layer is composed of carbon clusters (sp2-sp3 configuration) which develop an amorphous structure similar to a natural diamond and its related properties. The high-tech process, which combine various technique (magnetron sputtering and PE-CVD) guarantees the deposition of a very compact, smooth and adhered coatings.
- DG4 coating performs the highest corrosion resistance for carbon steel, making it perfect for the full body coating of cutting tweezers made of Carbon steel.



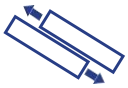
Hardness (up to 24 GPa) and good elastic modulus (up to 50GPa)

High adhesion to the metallic substrate

Full Black homogeneous color

Low thickness (3-4 microns)

High elasticity



High wear and abrasion resistance (protects fine tip tweezers from wear)

No particulate shedding (no contamination of the handled components)



Excellent resistance to chemical products and acid and alkaline solvents

Extemely high corrosion resistance

Bio-compatible, no contamination of biological tissue with metal particles, optimal for contact with the human epidermis

Not compatible with hydrogen peroxide-based solutions

Alcohol-resistant surface cleaning

Very clean material	**NVR (Non Volatile Residue)**	*0.088 µg/cm²*
	LPC 0.5 µm (Liquid Particle Count)	*7043 counts/cm²*
	IC (Ion Chromatoghraphy)	*chloride 0.039 µg/cm²*
		nitrate not detected
		sulfate 0.005 µg/cm²
		total anions 0.114 µg/cm²



ESD safe coating

Surface Resistance	**10^9 ohm**

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