TECHNICAL DATA SHEET

High-tek coating DC

General notes:

» This coating is composed of carbon clusters which develop a crystal structure similar to a natural diamond and practically detain the same properties of the diamond. The quota of the sp3-configured carbon lies at around 80-95%, which is the reason for the high quota of diamond structure. This high-tech coating is done by a very innovative plasma-assisted deposition technique. Furthermore, due to its procedure, the coating is completely free of hydrogen. During this process a pure diamond film grows directly on the exposed surfaces of the metallic substrate (this is not diamond powder adhesively bonded on the metal surface)

High hardness (up to 80 GPa)

High adhesion to the metallic substrate

Black colour

Low thickness (2 microns), high elasticity

Extremely high wear and abrasion resistance (protects fine tip tweezers from wear)

No particulate shedding (no contamination of the handled components)

Chemically inert up to 350°C

Bio-compatible (maintain cell integrity, no inflammatory response), no contamination of biological tissue with metal particles

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

Static Charge	**1.30 Volts**
Triboelectric Charge	**2.30 Volts**
Surface Resistance	**10^6 ohms**
Decay Time	**1.10 sec**