

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)

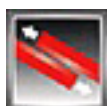


High hardness (up to 80 GPa)

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

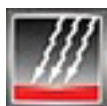
IC (Ion Chromatography)

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

10⁶ ohms

Decay Time

1.10 sec