

TECHNICAL DATA SHEET

High-tek coating DC

General notes:

- » This coating is composed of carbon clusters (sp²-sp³ configuration) which develop an amorphous structure similar to a natural diamond and its related properties. The quota of the sp³-configured carbon lies at around 60-80%, which is the reason for the high values of hardness and abrasion resistance. This high-tech coating is done by a very innovative plasma-assisted high vacuum deposition technique. Furthermore, due to its procedure, the coating is completely free of hydrogen and oxygen.



High hardness (up to 50 GPa) and high elastic modulus (up to 350GPa)
 High adhesion to the metallic substrate
 Anthracite colour
 Low thickness (1-2 microns)
 Good 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
 High corrosion resistance
 Bio-compatible (maintain cell integrity, no inflammatory response), no contamination of biological tissue with metal particles, nickel free
 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 Chromatography)

chloride 0.039 µg/cm²

nitrate not detected

sulfate 0.005 µg/cm²

total anions 0.114 µg/cm²



ESD safe coating

Surface Resistance

**10⁴
ohm**