

Physical Properties of **DIAMOMED™** **DLC***



Prosthesis Component

Composition	Carbon, hydrogen doping elements
Structure	Mixture of sp^3 (tetrahedral diamond type) and sp^2 (trigonal graphitic)
Coating Thickness	3.0 – 5.0 microns
Density	1.8-2.2 g/cm³
Hardness	3000-3500 HV (30-35 Gpa)
Co-efficient of friction	Diamolith® on Steel: 0.10 (Example: Steel on Steel 0.45)
Adherence	Scratch test: LC=40 N
Thermal conductivity	>400 W/K/m
Coefficient of dilation	$2 \cdot 10^{-6}/^{\circ}\text{C}$
Permeability	Barrier to hydrogen and other gases
Electrical resistivity	10^8 ohms cm
Chemical resistance	Inert in acids, alkalis, solvents, salts and water

** Diamond-Like Coating*



**APPLIED
DIAMOND
COATINGS, LLC**

Engineered Solutions for Material Performance

30 Ozick Drive • Durham CT 06422 • Phone: (860)349-3133 • Fax: (860) 349-1143