What is the polyimide cladding on CE Capillaries - FAQ

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Polyimide cladding is a protective outer coating applied to capillary electrophoresis (CE) capillaries to enhance their durability and performance in demanding analytical environments.

What Is Polyimide?

- Polyimide is an aromatic, linear polymer known for its exceptional thermal and chemical resistance.
- Unlike true thermoplastics, polyimide thermally degrades before reaching its glass transition temperature, meaning it does not melt or flow under heat.
- It is not cross-linked, which allows it to remain flexible while still offering robust protection.

Why Is It Used on CE Capillaries?

Polyimide cladding is ideal for CE applications because it provides:

- Solvent resistance – compatible with a wide range of organic and aqueous solvents.
- Thermal stability – performs reliably at both high and low temperatures.
- Barrier properties – protects the fragile fused silica capillary from mechanical damage and environmental exposure.
- Flexibility – allows the capillary to be coiled or routed without cracking the coating.

These properties make polyimide-coated capillaries suitable for routine and high-performance CE, as well as for integration into automated systems and diagnostic platforms.

🔗 Click ***HERE*** for Capillary Technical Properties
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