Remove the Polyimide Coating from Zero Flow Capillaries - How to

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Overview

This guide explains the correct procedure for removing the outer polyimide coating from Zero-Flow™ CE capillaries without damaging the internal polymer treatment that enables their controlled-flow properties. Tools such as the MICROSOLV Window Maker™ or direct flame application can harm the inner surface and create coating voids that compromise analytical performance. Recommended removal methods include the careful use of 98% fuming sulfuric acid—highly effective for dissolving polyimide—or a short exposure to a low-temperature flame.

Strict safety practices must be followed when handling corrosive chemicals or heat sources. A link to a detailed procedure is provided for users needing step-by-step instructions.

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The polymer coating applied to the inside wall of the Zero-Flow™ capillary can be damaged if a MICROSOLV Window Maker™ tool or an open flame is used to create a detection window. These methods are not recommended, as they may create a void or defect in the coating at that location, which can negatively affect your data and the performance of the capillary.

The recommended method for removing the outer polyimide coating is to apply 98% fuming sulfuric acid. Typically, a single drop is sufficient to remove the coating completely.

A low-temperature flame may also be used for a very short time, but extreme care must be taken to avoid damaging the internal coating.

Always follow approved and appropriate laboratory safety precautions when performing any of these procedures.

Click HERE for a suggested procedure to remove polyimide from Zero-Flow Capillaries.

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