

Liquid Lightguide Cleaning Instructions

Liquid lightguides need cleaning periodically to remove foreign material and deposition caused by outgassing. Cleaning ensures that maximum UV light transmission is achieved. Foreign materials and deposits may not be visible when the lightguide end is inspected, so the best way to determine lightguide degradation is by comparing the readings taken with a lightguide simulator (Figure 1) and comparing those readings with UV readings taken at the end of the lightguide (Figure 2). If UV readings taken at the end of the lightguide are less than 80% of the values from a lightguide simulator, the lightguide may require cleaning.



Figure 1. Take initial intensity reading with lightguide simulator

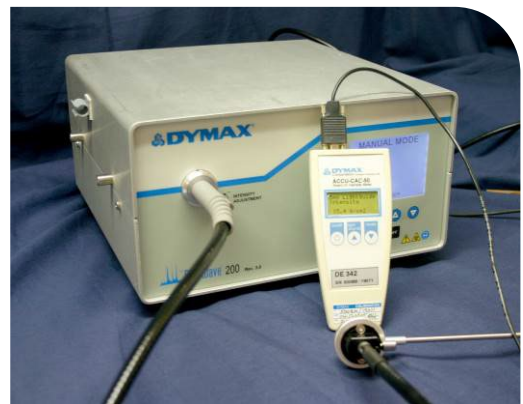


Figure 2. Take initial intensity reading at the end of lightguide

If the lightguide end needs cleaning, attempt to clean it using a tissue and solvent (Figure 3). The recommended cleaning agent is isopropyl alcohol. Chlorine-based solutions can be exceptionally damaging to liquid lightguides and should not be used for cleaning. If the contamination is not removable with solvent, clean the surface with a razor blade (Figure 4). Plastic or metal razor blades can be used. Take care not to chip the edge of the quartz glass window.

Figure 3.

Clean the lightguide end with a tissue and solvent



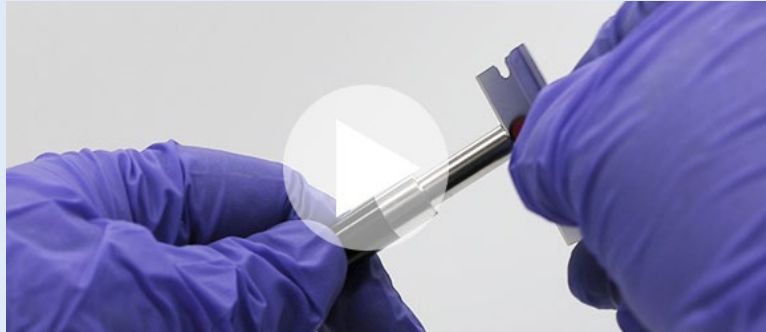
Figure 4.

For contamination not removable with solvent, clean the lightguide end with a plastic or metal razor blade



Once the lightguide is clean, obtain a UV reading at the end of the lightguide. A satisfactory UV reading indicates that the cleaning was successful. If sufficient improvement isn't obtained, ensure that the lightguide is fully seated and repeat measurement. If issue persists, the lightguide may need to be replaced.

View these instructions as a video on our YouTube channel!



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