

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

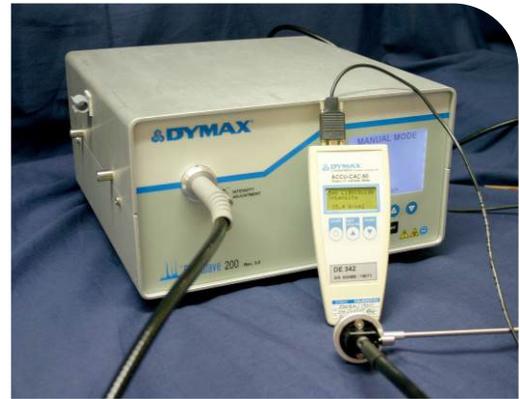


Figure 2. Take initial intensity reading at the end of lightguide

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



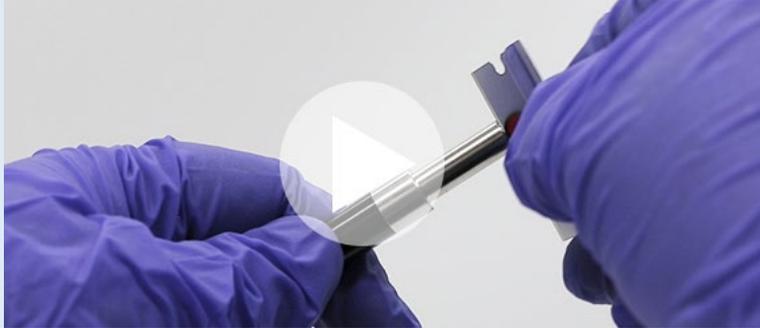
Figure 4.

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!



© 2005-2023 Dymax Corporation. All rights reserved. All trademarks in this guide, except where noted, are the property of, or used under license by Dymax Corporation, U.S.A.



www.dymax.com

The data contained in this bulletin is of a general nature and is based on laboratory test conditions. Dymax does not warrant the data contained in this bulletin. Any warranty applicable to the product, its application and use is strictly limited to that contained in Dymax's standard Conditions of Sale. Dymax does not assume responsibility for test or performance results obtained by users. It is the user's responsibility to determine the suitability for the product application and purposes and the suitability for use in the user's intended manufacturing apparatus and methods. The user should adopt such precautions and use guidelines as may be reasonably advisable or necessary for the protection of property and persons. Nothing in this bulletin shall act as a representation that the product use or application will not infringe a patent owned by someone other than Dymax or act as a grant of license under any Dymax Corporation Patent. Dymax recommends that each user adequately test its proposed use and application before actual repetitive use, using the data contained in this bulletin as a general guide. TT090 6/30/2023