EIT® INSTRUMENT CLEANING GUIDELINES

EIT radiometers are used to design, measure and control industrial UV applications in a wide variety of locations. The environmental conditions that our instruments are exposed to vary from pristine (medical clean room) to challenging (wood manufacturing facility). Careful cleaning of the outer optics using these guidelines will help your EIT instrument perform as designed between service intervals at EIT. The guidelines are general and specific questions should be directed to EIT (uv@eit.com). Instruments that stop functioning when accidently dropped, get stuck in equipment or wind up covered or immersed with the product being cured need to come back to EIT for further evaluation.

General Cleaning Guidelines

1. Establish an area for cleaning with the necessary supplies.
2. Avoid cleaning the optics with anything dry or abrasive such as a cloth, towel or clothing.
3. Fingerprints, oils from your hands, lint, dust, or contamination on the optics window usually increases the UV values reported.
4. Scratches to the metallic coating on optics window also most often cause the readings to increase.
5. There are two cleaning methods (Wipes, Swabs) described on this Guide. Select the one that best suits your needs and train your staff on these techniques. .
6. Further information including a link to videos showing these techniques can be found on the EIT web site (www.eit.com) under UV Products.

Steps For Cleaning with Swabs and Isopropyl Alcohol (IPA)

1. Examine the instrument to determine if it needs cleaning.
2. Carefully blow or brush loose particles away from the optics. Handheld bulbs to blow air are available from camera stores.
3. If needed, use “canned air” in very short (< 1 second) bursts from 8-10 inches or more away from the optics. Short bursts from a distance will minimize the transfer of any additives from the ‘canned air’ to the optics. If using compressed air, make sure it is oil free, “instrument grade” air.
4. Plan to use a minimum of two lint free swabs to clean the optics. The first swab, once moistened with the IPA is used to gently apply the IPA solution in a circular motion. Rotate the swab between your fingers as you work your way around the optics window in a circular fashion. No double dipping-do not put this swab back into the IPA. Discard it to prevent contamination of the IPA from any material picked up from the optics. Use a clean swab if additional IPA is needed.
5. Use a clean swab in a gentle circular motion to dry the IPA on the optics. Again rotate the swab between your fingers as you gently move it over the surface. Stop when the majority of the IPA has been absorbed by the swab. Properly dispose of the swabs.
6. Repeat steps 4 and 5 if needed using new swabs.

Hints

1. Label the IPA as required & follow the Safety Data Sheet (SDS) for IPA. Consider a dedicated IPA dispenser to avoid cross contamination from other activities.
2. Do not use IPA with detergents or other additives.
3. Use lint free cotton swabs. If you see streaking, consider another brand of cotton swab.
4. If you “double dip”, the IPA can be compromised from material transferred from the instrument optics via the swab. Glue holding the cotton to the applicator stick may also be dissolved by the IPA and transferred to the IPA.

Top to Bottom

- Cleaning supplies in place
- Use of handheld bulb
- Use of ‘canned air’ from a distance
- Application of IPA with a circular motion while rotating the swab between fingers

EIT® Instrument Wipes

EIT has sourced an industrial grade wipe that can be used for cleaning the optics on our UV measurement products. The Instrument Wipe contains a fast evaporating, mild solvent for cleaning EIT optics. The wipe is non-linting, non-abrasive and does not contain any detergents or surfactants that can harm the optics. Each wipe stays sealed until used to prevent contamination of the cleaning solution.

Steps For Cleaning with EIT Instrument Wipes

1. Examine the instrument to determine if it needs cleaning.
2. Carefully blow or brush loose particles away from the optics. Handheld bulbs to blow air are available from camera stores.
3. If needed, use “canned air” in very short (< 1 second) bursts from 8-10 inches or more away from the optics. Short bursts from a distance will minimize the transfer of any additives from the ‘canned air’ to the optics. If using compressed air, make sure it is oil free, “instrument grade” air.
4. EIT suggests the use of gloves to prevent the transfer of oils from your hands to the wipes and possibly to the optics of the instrument. Handle the gloves from the wrist and not the part of the glove that will hold the wipe.
5. Once the sealed package is opened, the wipe can be unfolded and the optics cleaned with a gentle circular motion. We suggest bunching a small section of the wipe to start.
6. Move to different areas of the cloth wipe and bunch new sections as you clean. The Wipe is large enough that you may be able to clean multiple instruments. Properly dispose of the wipe.

Top to Bottom

- Cleaning supplies in place
- Using gloves to prevent transfer of finger oils
- Use of EIT Instrument Wipe in a circular motion while using different parts of the nonabrasive wipe

Hints

1. EIT strongly suggests the use of gloves to prevent the transfer of oils from your hand to the optics on the unit.
2. Each wipe is fresh and ready for use. The IPA in the wipe does not contain any detergents or surfactants and is not subject to being compromised from a cleaning of a previous instrument and/or other use in your facility.
3. The Safety Data Sheet (SDS) for EIT Instrument Wipes is posted on our website (www.eit.com) under UV Products. There is also a link to a video showing the cleaning technique with the Wipes.
4. EIT Instrument Wipes are available for purchase in boxes of 50

For more information contact EIT or:

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