

Cleaning and Reconditioning of NanoDrop Instrument Pedestals

CLEANING

- Apply 5 ul of dH₂O solution to the bottom pedestal.
- Lower the upper pedestal arm to form a liquid column; let it sit for approximately 2-3 minutes.
- Wipe away the water from both the upper and lower pedestals with a clean lab wipe.

Note: Typically dH₂O is sufficient for removal of samples that have dried on the optical pedestals. There are a few cases (i.e. dried proteins) that may require a more rigorous cleaning protocol. For these cases, we recommend that 0.5M HCl be substituted for dH₂O in the above procedure. After using HCl, repeat the process with 5 ul of dH₂O to remove any residual HCl.

Do not use detergents or isopropanol as cleaning agents as their use may result in the pedestals becoming unconditioned. When the pedestal becomes unconditioned sample droplets will 'flatten-out' instead of 'beading up' when applied to the bottom pedestal.

Some buffer components and reagents as well as detergents may cause the pedestal surfaces to become unconditioned. We have noted that routine use of the Bradford reagent may result in difficulty forming columns with 1 ul samples.

RECONDITIONING THE PEDESTALS

Use the NanoDrop Pedestal Reconditioning Compound (PR-1) as a rapid means of reconditioning the pedestals when the surface properties have been compromised and liquid columns break during measurement.

1. Open the vial containing PR-1 and use the applicator provided in the kit to remove a pin-head sized amount of the compound.
Note: Additional applicators may be purchased from VWR, cat #89023-000.
2. Apply a very thin, even layer of PR-1 to the surface of the upper and lower pedestals and let dry (30 secs).
3. Fold a clean, dry laboratory wipe into quarters and remove the PR-1 by aggressively rubbing the surface of the upper and lower pedestals until all compound residue is removed. Note: The appearance of black residue on the lab wipe is normal.
4. Remove the excess lint around the pedestal. For the ND-8000— it is also important to remove the lint from the light source window shown by the upper red arrow.



Test the effectiveness of the re-conditioning by pipetting a 1ul sample of dH₂O (using a calibrated 2 ul pipettor) onto the lower measurement pedestal. The figure to the far right shows 1ul sample's of dH₂O on properly conditioned pedestals. Note: The images above show the PR-1 as applied to the ND-8000 8-Sample spectrophotometer.

NanoDrop Technologies recommends the use of a calibrated 2 ul pipettor for sample loading. Although the instrument was designed for 1 ul samples, using larger volumes (1.5-2.0 ul) will often overcome the inherent surface tension properties associated with some detergent based or volatile samples and eliminate problems with column breakage.

Please contact Technical Support at 302-479-7707 or send an email to info@nanodrop.com for further information.

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