

Pedestal Cleaning and Reconditioning

Cleaning

The primary maintenance for the NanoDrop Lite is to keep the pedestal surfaces clean.

1. Pipette 3 μl of deionized water (dH_2O) onto the bottom pedestal.
Do not use a squirt bottle to apply dH_2O or any other liquid to the surface of the instrument.
2. Lower the arm to form a liquid column; let it sit for approximately 2-3 minutes.
3. Wipe away the water from both the upper and lower pedestals with a dry, lint-free lab wipe.

Tip

Between measurements: Wipe the sample from both the upper and lower pedestals with a clean, dry, lint-free lab wipe, to prevent sample carryover and avoid residue buildup.

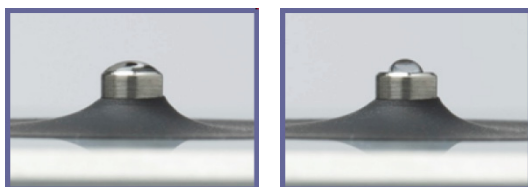
Between users: A final cleaning of both pedestals with dH_2O is recommended after the last sample measurement is collected.

Reconditioning

The pedestal surface may become unconditioned over time, especially when measuring proteins or samples that contain surfactants or detergents. If the surface properties have been compromised, samples may not "bead up" on the pedestal or the liquid column may break during measurement. Use the instrument pedestal reconditioning kit, PR-1, as a rapid means of reconditioning the pedestal back to a condition optimal for liquid column formation.

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.
2. Apply a very thin, even layer of PR-1 to the surface of the upper and lower pedestals and wait 30 seconds for the PR-1 to dry.
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.
The appearance of a black residue on the laboratory wipe is normal. Continue wiping the pedestals with a clean lab wipe until the lab wipe shows no black residue.
4. Use canned air to remove excess lint from the diaphragm that surrounds the base of the lower pedestal.

Test the effectiveness of the re-conditioning by pipetting a 1 μl sample of dH_2O (using a calibrated 2 μl pipettor) onto the lower pedestal to visually verify that the dH_2O beads up.



The figure on the left shows how an aqueous sample "flattens out" on an unconditioned pedestal. The figure on the right shows how 1 μl of dH_2O should bead up on a properly conditioned pedestal.

NOTICE

- All forms of Hydrofluoric Acid (HF) are incompatible, as the fluoride ion will dissolve the quartz fiber optic cable.
- Do not allow alcohol, bleach, acetone or other solvents to remain on the diaphragm surrounding the pedestal for more than a minute as the adhesive keeping the seal in place may be adversely affected. If the seal comes loose, please contact us.
- Avoid exposing the pedestals to detergents or isopropyl alcohol as these solvents can un-condition the pedestal surfaces. If the pedestals are exposed to these solvents, clean two times with 3 μl H_2O .

Excluding HF, the NanoDrop Lite spectrophotometer pedestals are compatible with most solvents typically used in life science laboratories. Do not expose the diaphragm around the pedestal to these solvents for more than one to two minutes. It is best that pedestals are cleaned with dH_2O after exposure to the solvents in Table 1.

Table 1. Solvents compatible with NanoDrop Lite pedestals

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|------------------------|-------------------------|--------------------------------|
| • acetone | • dilute HNO_3 | • isopropanol |
| • Acetonitrile | • dilute acetic acid | • methanol |
| • benzene | • DMF | • n-propanol |
| • butanol | • DMSO | • sodium hydroxide |
| • carbon tetrachloride | • ethanol | • sodium hypochlorite (bleach) |
| • chloroform | • ether | • THF |
| • dilute HCl | • hexane | • toluene |