



Thermo 49i O₃ Maintenance Schedule

Routinely (weekly/monthly)

1. Check the instrument for any alarms
2. Check recent ambient and calibration data for anomalies.
3. Check key diagnostics such as flow, pressure and temperatures.
Recommend graphing 1-month periods to check for drift.

Every 1 month

1. Replace the sample filter on the gas inlet line.
2. Check pump for excessive noise/vibration/heat.

Every 3 months

1. Clean fan filter

Every 6 months

1. Perform a multi-point calibration and adjust slope/offset if necessary
NOTE: The slope should rarely, if ever, be adjusted. UV photometry is a primary method, and if an instrument is reading wrong it means that there is a problem that should be resolved. Changing the slope will just temporarily hide the problem. The offset should also only be adjusted with caution.
2. Perform a flow check – sample, zero and span
3. Determine the new expected span check value or adjust Ozonator lamp power for desired value.

Annually

1. Perform a leak check
2. Perform an ozone scrubber efficiency test and replace if necessary
3. Clean photometer cells (damp cloth pushed through cell with Teflon tubing)
4. Adjust lamp power to bring intensities close to 100,000 and then perform a detector calibration to bring both intensities to exactly 100,000.

Other - as needed

1. Replace lamp when it can no longer be adjusted or is very noisy.
2. Clean/replace capillary if one flow drops but not the other.
3. Install pump kit if both flows drop.
4. Replace sample pump if excessive noise/vibration/heat.