O-I Analytical Model 1010 TIC-TOC analyzer

Daily Startup & Shut Down

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Reagents

Persulfate:	100 g $Na_2S_2O_8$ / L for 0 – 50 µg C (typical) or
	200 g $Na_2S_2O_8$ / L for 0 – 100 µg C
5% Phosphoric Acid:	Dilute 59 mL of concentrated H_3PO_4 to 1 L
Stock Standard:	1.065 g potassium biphthalate per 500 mL = 1,000 µg C / mL
Calibration Check:	5 mL of Stock Standard diluted to 1,000 mL = 5.00 µg C / mL

Startup

1. Log your samples into the bound notebook.
2. Ensure sufficient $Na_2S_2O_8$, H_3PO_4, and N_2 (> 500 psi).
3. Top off Milli-Q carboy.
4. Empty waste bucket.
5. Turn N_2 up to 60 psi.
6. Launch software.
7. Load the appropriate sequence and calibration.
8. Load the autosampler carousel and top off the wash station.
9. Pump the oxidant and acid 96 times, then drain. Twice.
10. WinTOC output. Specify base directory, subdirectory, log file and prefix, and reset counter to 1.
11. Start with 10 to 20 blanks. This blank run may be aborted after the area counts of the blanks drop below 500.
12. In the sequence table, change the blanks prior to the first sample to 1 or 2, save the sequence, and restart.
13. It takes about 0.36 hr to run each vial in duplicate.

Shut Down

1. Turn the N_2 down to 10 psi.
2. Unload the autosampler.
3. Print and/or copy your data to floppy.

Notes:

The autosampler holds 53 vials. If you include one blank followed by one calibration check at the beginning of the tray, and include calibration checks after every 9 or 10 samples, you can run up to 46 unknowns. It takes about 19 hours to run a tray of 53.
Cailbration: In the calibration window, enter the concentrations. In the sequence table, change run typ to std 1, std 2, etc.