

PAH CALIBRATION INSTRUCTIONS

For Target PAHs using UVF-TRILOGY with METHANOL SOLVENT

Visit: www.site-lab.com Call Toll Free 877-SITELAB or Dial (USA) 978-363-2299 UVF-TRILOGY SOP-CAL060M-V3



Calibration Kit & UV Module:

Use Sitelab's PAH Calibration Kit & PAH Module Only!

HYDROCARBONS



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Includes 5 calibration standards plus

two 5 ppm reference standards used to make new calibrators, if necessary.

PAHS: POLYCYCLIC AROMATIC

CAL-060M



7200-MOD-PAHS Detects U.S. EPA 16 Compounds

Minimum Detection Limit = 0.05 ppm Highest Standard to Use = 1.5 ppm Upper Linear Limit*= 2 to 3 ppm

*Avoid sample readings above this range. Readings above the linear limit may "quench" or swamp the detector, producing lower response. Samples should be diluted and retested for more accurate results.

Set up Analyzer:



Open the lid and insert the module firmly into position using the handle. Turn the instrument on using the switch in the back. Always choose "UV" when prompted to select and confirm the module being used is UV. Do not use absorbance, turbidity or other choices listed. Press "Calibrate" and then press "Run New Calibration" or "Use Stored Calibration." Trilogy can store up to 18 calibrations.

View Stored Calibrations:



When the device is first turned on, the home screen will display a green "Measure Fluorescence" button in the RFU mode. RFU is Raw Fluorescence Units (voltage).

If the analyzer is already factory calibrated or to retrieve a new calibration you created, press "Calibrate" and "Use Stored Calibration." Choose and select the PAH-060M test. This screen allows you to view calibration details. RFU and concentration values should be linear. Never press the "Delete" button or curve will be lost. Press "ESC" to go back to the home screen.





RFU response is displayed for Blank and 4 Standards

Start a New Calibration:







From the home screen, press "Calibrate" and "Run New Calibration," Select "PPM" for unit of measure. Fill the solvent dispenser bottle with methanol and fill the glass cuvette with solvent, about half full. Wipe the outside glass clean with a tissue wipe to remove liquids or fingerprints if necessary. Carefully place the cuvette into the PAH UV module, close the lid and press the "OK" button.

The analyzer will measure the blank for a few seconds and briefly displays the RFU response. Once the new calibration is finished and saved, RFU values for the blank and standards can be viewed. When testing Target PAHs, blanks should have RFU values in the 0 to 10 range. Fluorescence of the blank is automatically subtracted from sample readings in the Direct Concentration Mode.

Test Calibration Standards:





included with the PAH kit to create a linear, 4-point curve or perform a quick, 1-point calibration using the 1.5 ppm standard and a blank. Enter the concentration of each standard when prompted, fill the glass cuvette half full, place into module, close the lid and press "OK". Pour the standards back when finished; the calibrators are reusable. Test remaining standards in order up to 1.5 ppm. When completed, press "YES" to save and enter a name.

Quality Controls to Perform:





From the home screen, test a standard like a sample to confirm the analyzer is operating properly. Readings should be close (within 20%) to the standard's concentration. Test the 0.05 ppm standard to check the PAH detection limit. Test a solvent blank too to confirm the methanol is clean. Readings should be close to zero. If not, then recalibrating the analyzer may be necessary.

See "Certificate of Analysis" for RFU values to expect. Compare to factory calibration (above).



PAH CALIBRATION INSTRUCTIONS

For Target PAHs using UVF-TRILOGY with HEXANE SOLVENT

Visit: www.site-lab.com Call Toll Free 877-SITELAB or Dial (USA) 978-363-2299 UVF-TRILOGY SOP-CAL060H-V2



Calibration Kit & UV Module:

Use Sitelab's PAH Calibration Kit & PAH Module Only!



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PAHS: POLYCYCLIC AROMATIC HYDROCARBONS

Includes 5 calibration standards plus two 5 ppm reference standards used to make new calibrators, if necessary.

CAL-060H



7200-MOD-PAHS
Detects U.S. EPA 16 Compounds

Minimum Detection Limit = 0.05 ppm Highest Standard to Use = 1.5 ppm Upper Linear Limit*= 2 to 3 ppm

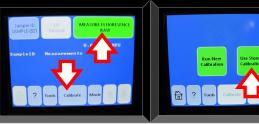
*Avoid sample readings above this range . Readings above the linear limit may "quench" or swamp the detector, producing lower response. Samples should be diluted and retested for more accurate results.

Set up Analyzer:



Open the lid and insert the module firmly into position using the handle. Turn the instrument on using the switch in the back. Always choose "UV" when prompted to select and confirm the module being used is UV. Do not use absorbance, turbidity or other choices listed. Press "Calibrate" and then press "Run New Calibration" or "Use Stored Calibration." Trilogy can store up to 18 calibrations.

View Stored Calibrations:

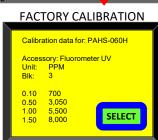


When the device is first turned on, the home screen will display a green "Measure Fluorescence" button in the RFU mode. RFU is Raw Fluorescence Units (voltage).

If the analyzer is already factory calibrated or to retrieve a new calibration you created, press "Calibrate" and "Use Stored Calibration." Choose and select the PAH-060H test. This screen allows you to view calibration details. RFU and concentration values should be linear. Never press the "Delete" button or curve will be lost. Press "ESC" to go back to the home screen.

Start with 0.1 ppm





RFU response is displayed for Blank and 4 Standards

Start a New Calibration:





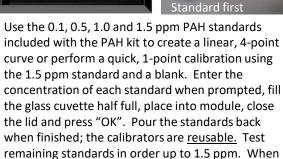


From the home screen, press "Calibrate" and "Run New Calibration." Select "PPM" for unit of measure. Fill the solvent dispenser bottle with hexane and fill the glass cuvette with solvent, about half full. Wipe the outside glass clean with a tissue wipe to remove liquids or fingerprints if necessary. Carefully place the cuvette into the PAH UV module, close the lid and press the "OK" button.

The analyzer will measure the blank for a few seconds and briefly displays the RFU response. Once the new calibration is finished and saved, RFU values for the blank and standards can be viewed. When testing Target PAHs, blanks should have RFU values in the 0 to 10 range. Fluorescence of the blank is automatically subtracted from sample readings in the Direct Concentration Mode.

Test Calibration Standards:

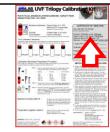




completed, press "YES" to save and enter a name.

Quality Controls to Perform:





From the home screen, test a standard like a sample to confirm the analyzer is operating properly. Readings should be close (within 20%) to the standard's concentration. Test the 0.05 ppm standard to check the PAH detection limit. Test a solvent blank too to confirm the hexane is clean. Readings should be close to zero. If not, then recalibrating the analyzer may be necessary.

See "Certificate of Analysis" for RFU values to expect. Compare to factory calibration (above).