

GRO CALIBRATION INSTRUCTIONS

For Applications using UVF-TRILOGY with **METHANOL SOLVENT**



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Visit: www.site-lab.com Call Toll Free 877-SITELAB or Dial (USA) 978-363-2299 UVF-TRILOGY SOP-CAL025M-V4

Calibration Kit & UV Module:

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



CAL-025M



7200-MOD-BTEX

GRO: GASOLINE RANGE ORGANIC HYDROCARBONS

Includes 5 calibration standards plus two 25 ppm reference standards used to make new calibrators, if necessary.

Minimum Detection Limit = 0.5 ppm
Highest Standard to Use = 10 ppm
Upper Linear Limit* = 15 to 20 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 "GRO-025M" 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.

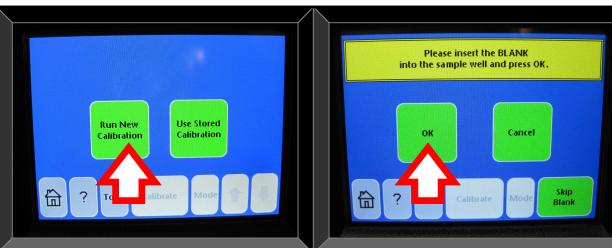
FACTORY CALIBRATION

Calibration data for: GRO-025M	
Accessory: Fluorometer UV	PPM
Unit:	Bulk:
0.50	20
1.00	30
3.00	60
5.00	90
10.00	155

SELECT

RFU response is displayed for Blank and 5 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 GRO 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 GRO, solvent blanks should have RFU values in the 5 to 15 range. Fluorescence of the blank is automatically subtracted from sample readings in the Direct Concentration Mode.

Test Calibration Standards:



Start with lowest Standard first

For maximum performance, use all 5 standards included with the GRO kit to create a linear, multi-point curve or perform a quick, 1-point calibration using the 10 ppm standard and a blank. Enter the concentration of each standard when prompted, fill cuvette half full, place into module, close the lid and press "OK". Pour the standards back when finished; the calibrators are reusable. Test the remaining standards in order, up to 10 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 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" included with GRO kit for additional instructions with RFU values to expect. Compare to factory calibration (above).

GRO CALIBRATION INSTRUCTIONS

For Applications using UVF-TRILOGY with **HEXANE SOLVENT**



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Visit: www.site-lab.com Call Toll Free 877-SITELAB or Dial (USA) 978-363-2299 UVF-TRILOGY SOP-CAL025H-V1

Calibration Kit & UV Module:

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



CAL-025H



7200-MOD-BTEX

GRO: GASOLINE RANGE ORGANIC HYDROCARBONS

Includes 5 calibration standards plus two 25 ppm reference standards used to make new calibrators, if necessary.

Minimum Detection Limit = 0.5 ppm
Highest Standard to Use = 10 ppm
Upper Linear Limit* = 15 to 20 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." Select the "GRO-025H" 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.

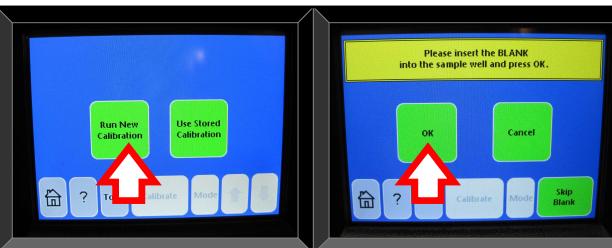
FACTORY CALIBRATION

Calibration data for: GRO-025H	
Accessory: Fluorometer UV	PPM
Unit:	Bulk:
0.50	27
1.00	35
3.00	58
5.00	80
10.00	130

SELECT

RFU response is displayed for Blank and 5 Standards

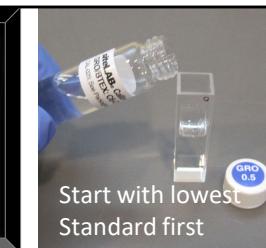
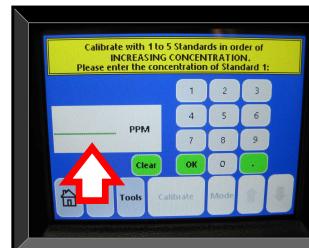
Start a New Calibration:



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 GRO 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 GRO, solvent blanks should have RFU values in the 5 to 20 range. Fluorescence of the blank is automatically subtracted from sample readings in the Direct Concentration Mode.

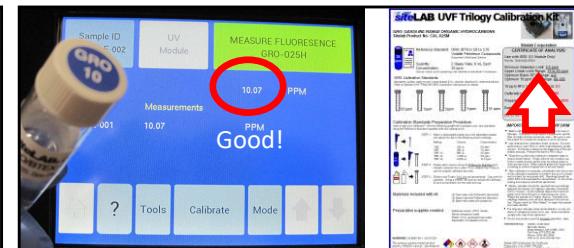
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Quality Controls to Perform:



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 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" included with GRO kit for additional instructions with RFU values to expect. Compare to factory calibration (above).