SITELAB TPH-Oil Calibration Kit

TOTAL PETROLEUM HYDROCARBONS, OIL & GREASE RANGE

Part No. CAL-056H ● Use with UVF-TRILOGY Analyzer





Reference

TPH C15-C50 Oil & Grease

Standard: Range Hydrocarbons

Dissolved in Hexane Solvent

Quantity: 2 Glass Vials; 6 mL Each

Concentration: 500 ppm

Use as a backup for preparing new calibration standards if necessary

TPH-Oil Calibration Standards

Standards contain ready-to-use, concentrated 5 mL volumes dissolved in hexane solvent. Refer to Sitelab's UVF-TRILOGY TPH-Oil Calibration Instructions for details.







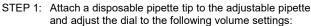


100 ppm

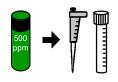
Calibration Standards Preparation Procedure

Lose or spill your calibrator? Use the following guidelines to prepare your own standards using the Reference Standard supplied with this calibration kit:





Setting:	Volume:	Concentration
"050"	50 uL	5 ppm
"250"	250 uL	25 ppm
"250"x4	1,000 uL	100 ppm



STEP 2: Pipette each volume using the Reference Standard and transfer contents into a clean 10 mL graduated plastic test tube. Rinse the tube and cap first with hexane before using it to clean and remove any phthalates in the plastic.



STEP 3: Dilute to the tube's 5 mL line using hexane. Tighten cap and briefly shake contents. Remove cap and pour standard into the calibrator's glass vial. Be sure the glass vial is empty first before doing so. When finished, rinse test tube, cap and pipette tip with solvent to reuse.

Materials included with kit: (5) Glass vials with Calibration Standards

(2) Glass vials with Reference Standard

(3) Plastic graduated test tubes with pipette tips

Other supplies needed: Hexane solvent. HPLC Grade

Solvent dispenser bottle Gilson adjustable micro-pipette

WARNING! CAS#110-54-3 UN #1208

This product contains hexane solvent (>99.95% volume). See Material Safety Data Sheet provided for details.









CERTIFICATE OF ANALYSIS:

Use with TPHOIL UV Module Only! Part No. 7200-MOD-TPHOIL

Minimum Detection Limit: 5 ppm Upper Linear Limit Range: 400 to 500 ppm Optimum Blank RFU Range: 100-400

Optimum 100 ppm RFU Range: 125,000-150,000

100 ppm Standard Response: 136,960 RFU

3-Point Calibration Curve Slope: R² 1.00

Preparation Date: MARCH 10, 2022

Expiration Date: SEPTEMBER 10, 2022

Lot ID# 5415OK5621 UVF S/N 724000118

IMPORTANT QA/QC to PERFORM

- Before calibrating, inspect the UV module for dust or damage. The green circuit board, sample well, optical filter and light window should be clean. Be sure to use the proper UV module for analysis or error will occur.
- Use hexane solvent for calibration blank analysis. For best performance, use HPLC or other high laboratory grade solvent. The blank is tested at the beginning of the calibration process. Record the blank's RFU value.
- Rinse the cuvette with hexane in between tests to avoid contamination. Empty solvent into a waste cup. Invert cuvette and tap gently onto dry tissue wipes to drain excess liquid. Wipe outside glass with tissue prior to testing to remove fingerprints or excess liquids.
- After calibration is complete, periodically test one or two of the calibration standards to confirm the curve is linear and to check for instrument drift. Readings should be within 20% of the standard's concentration. If not, recalibrating the analyzer should be performed.
- Ideally, samples should be reported having readings between the lowest and highest calibration standards (5 to 100 ppm). Avoid readings above the maximum upper limit (400 to 500 ppm) or quenching may occur. Retest sample at a higher dilution. Samples with readings between zero and the detection limit are too low. Report result as "Non-Detect" or retest the sample at a lower dilution.
- For long term storage, keep all standards in a cool, dry place or refrigerator when not in use. Store standards upright with caps firmly tightened.
- Do not use product past the 6-month expiration date.

Manufactured By: Sitelab Corporation

86 Coffin Street

West Newbury, MA 01985 USA: 978-363-2299 • site-lab.com

SiteLAB TPH-Oil Calibration Kit

TOTAL PETROLEUM HYDROCARBONS, OIL & GREASE RANGE

Part No. CAL-057H ● Use with UVF-TRILOGY Analyzer





Reference TPH C15-C50 Oil & Grease

Standard: Range Hydrocarbons Dissolved in Hexane Solvent

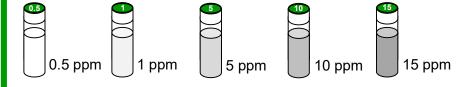
Quantity: 2 Glass Vials; 6 mL Each

Concentration: 50 ppm

Use as a backup for preparing new calibration standards if necessary

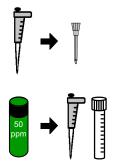
TPH-Oil Calibration Standards

Standards contain ready-to-use, concentrated 5 mL volumes dissolved in hexane solvent. Refer to Sitelab's UVF-TRILOGY TPH-Oil Calibration Instructions for details.



Calibration Standards Preparation Procedure

Lose or spill your calibrator? Use the following guidelines to prepare your own standards using the Reference Standard supplied with this calibration kit:



STEP 1: Attach a disposable pipette tip to the adjustable pipette and adjust the dial to the following volume settings:

Setting:	Volume:	Concentration
"050" "100" "250"x2 "250"x4	50 uL 100 uL 500 uL 1,000 uL	0.5 ppm 1 ppm 5 ppm 10 ppm
"250"x6	1,500 uL	15 ppm

STEP 2: Pipette each volume using the Reference Standard and transfer contents into a clean 10 mL graduated plastic test tube. Rinse the tube and cap first with hexane before using it to clean and remove any phthalates in the plastic.



STEP 3: Dilute to the tube's 5 mL line using hexane. Tighten cap and briefly shake contents. Remove cap and pour standard into the calibrator's glass vial. Be sure the glass vial is empty first before doing so. When finished, rinse test tube, cap and pipette tip with solvent to reuse.

Materials included with kit: (5) Glass vials with Calibration Standards

(2) Glass vials with Reference Standard

(5) Plastic graduated test tubes with pipette tips

Other supplies needed:

Hexane solvent. HPLC Grade Solvent dispenser bottle Gilson adjustable micro-pipette

WARNING! CAS#110-54-3 UN #1208

This product contains hexane solvent (>99.99% volume). See Material Safety Data Sheet provided for details.







CERTIFICATE OF ANALYSIS:

Use with TPHOIL UV Module Only! Part No. 7200-MOD-TPHOIL



Minimum Detection Limit: 0.5 ppm Upper Linear Limit Range: 40 to 50 ppm Optimum Blank RFU Range: 100-400

Optimum 15 ppm RFU Range: 23,000-30,000

15 ppm Standard Response: 26,253 RFU

5-Point Calibration Curve Slope: R² 1.00

Preparation Date: MARCH 9, 2022

Expiration Date: **SEPTEMBER 9, 2022**

Lot ID# **5415OK5621** UVF S/N **724000118**

IMPORTANT QA/QC to PERFORM

- Before calibrating, inspect the UV module for dust or damage. The green circuit board, sample well, optical filter and light window should be clean. Be sure to use the proper UV module for analysis or error will occur.
- Use hexane solvent for calibration blank analysis. For best performance, use HPLC or other high laboratory grade solvent. The blank is tested at the beginning of the calibration process. Record the blank's RFU value.
- Rinse the cuvette with hexane in between tests to avoid contamination. Empty solvent into a waste cup. Invert cuvette and tap gently onto dry tissue wipes to drain excess liquid. Wipe outside glass with tissue prior to testing to remove fingerprints or excess liquids.
- After calibration is complete, periodically test one or two of the calibration standards to confirm the curve is linear and to check for instrument drift. Readings should be within 20% of the standard's concentration. If not, recalibrating the analyzer should be performed.
- Ideally, samples should be reported having readings between the lowest and highest calibration standards (0.5 to 15 ppm). Avoid readings above the maximum upper limit (20 to 30 ppm) or quenching may occur. Retest the sample at a higher dilution. Samples with readings between zero and the detection limit are too low. Report result as "Non-Detect" or retest the sample at a lower dilution.
- For long term storage, keep all standards in a cool, dry place or refrigerator when not in use. Store standards upright with caps firmly tightened.
- Do not use product past the 6-month expiration date.

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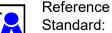
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SiteLAB. PAH Calibration Kit

POLYCYCLIC AROMATIC HYDROCARBONS

Part No. CAL-060H • Use with UVF-TRILOGY Analyzer





Target PAHs, U.S. EPA Method 8270 PAH Compounds

Dissolved in Hexane Solvent

Quantity:

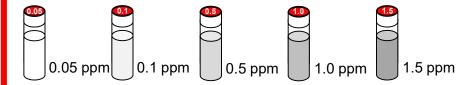
2 Glass Vials; 6 mL Each

Concentration: 5 ppm (5,000 ppb)

Use as a backup for preparing new calibration standards if necessary

PAH Calibration Standards

Standards contain ready-to-use, concentrated 5 mL volumes dissolved in hexane solvent. Refer to Sitelab's UVF-TRILOGY PAH Calibration Instructions for details.



Calibration Standards Preparation Procedure

Lose or spill your calibrator? Use the following guidelines to prepare your own standards using the Reference Standard supplied with this calibration kit:

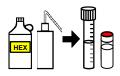




STEP 1: Attach a disposable pipette tip to the adjustable pipette and adjust the dial to the following volume settings:

Setting:	Volume:	Concentration
"050"	50 uL	0.05 ppm
"100"	100 uL	0.1 ppm
"250"x2	500 uL	0.5 ppm
"250"x4	1,000 uL	1.0 ppm
"250"x6	1,500 uL	1.5 ppm

STEP 2: Pipette each volume using the Reference Standard and transfer contents into a clean 10 mL graduated plastic test tube. Rinse the tube and cap first with hexane before using it to clean and remove any phthalates in the plastic.



STEP 3: Dilute to the tube's <u>5 mL line</u> using hexane. Tighten cap and briefly shake contents. Remove cap and pour standard into the calibrator's glass vial. Be sure the glass vial is empty first before doing so. When finished, rinse test tube, cap and pipette tip with solvent to reuse.

Materials included with kit: (5) Glass vials with Calibration Standards

(2) Glass vials with Reference Standard

(5) Plastic graduated test tubes with pipette tips

Other supplies needed:

Hexane solvent. HPLC Grade Solvent dispenser bottle Gilson adjustable micro-pipette

WARNING! CAS#110-54-3 UN #1208

This product contains hexane solvent (>99.99% volume). See Material Safety Data Sheet provided for details.











CERTIFICATE OF ANALYSIS:

Use with PAH UV Module Part No. 7200-MOD-PAHS



Minimum Detection Limit: 0.05 ppm Upper Linear Limit Range: 2 to 3 ppm Optimum Blank RFU Range: 0-10

Optimum 1.5 ppm RFU Range: 9,000-10,000

1.5 ppm Standard Response: 8,900 RFU

5-Point Calibration Curve Slope: R² 0.998

Preparation Date: MARCH 9, 2022

Expiration Date: **SEPTEMBER 9, 2022**

Lot ID# 219121344 UVF S/N 724000118

IMPORTANT QA/QC to PERFORM

- Before calibrating, inspect the UV module for dust or damage. The green circuit board, sample well, optical filter and light window should be clean. Be sure to use the proper UV module for analysis or error will occur.
- Use hexane for calibration blank analysis. For best performance, use HPLC or other high laboratory grade solvent. The blank is tested at the beginning of the calibration process. Record the blank's RFU value.
- Rinse the cuvette with hexane in between tests to avoid contamination. Empty solvent into a waste cup. Invert cuvette and tap gently onto dry tissue wipes to drain excess liquid. Wipe outside glass with tissue prior to testing to remove fingerprints or excess liquids.
- After calibration is complete, periodically test one or two of the calibration standards to confirm the curve is linear and to check for instrument drift. Readings should be within 20% of the standard's concentration. If not, recalibrating the analyzer should be performed.
- Ideally, samples should be reported having readings between the lowest and highest calibration standards (0.05 to 1.5 ppm). Avoid readings above the maximum upper limit (2 to 3 ppm) or quenching may occur. Retest the sample at a higher dilution. Samples with readings between zero and the detection limit are too low. Report result as "Non-Detect" or retest the sample at lower dilution.
- For long term storage, keep all standards in a cool, dry place or refrigerator when not in use. Store standards upright with caps firmly tightened.
- Do not use product past the 6-month expiration date.

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SiteLAB EDRO Calibration Kit

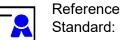
EXTENDED DIESEL RANGE ORGANIC HYDROCARBONS

Part No. CAL-042H • Use with UVF-TRILOGY Analyzer









TPH-EDRO C10-C36 Extended Diesel Range Organic Hydrocarbons

Dissolved in Hexane Solvent

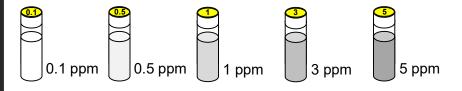
Quantity: 2 Glass Vials; 6 mL Each

Concentration: 20 ppm

Use as a backup for preparing new calibration standards if necessary

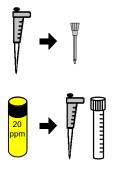
EDRO Calibration Standards

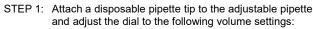
Standards contain ready-to-use, concentrated 5 mL volumes dissolved in hexane solvent. Refer to Sitelab's UVF-TRILOGY EDRO Calibration Instructions for details.



Calibration Standards Preparation Procedure

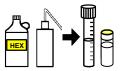
Lose or spill your calibrator? Use the following guidelines to prepare your own standards using the Reference Standard supplied with this calibration kit:





Setting:	Volume:	Concentration:
"025"	25 uL	0.1 ppm
"125"	125 uL	0.5 ppm
"250"	250 uL	1.0 ppm
"250"x3	750 uL	3.0 ppm
"250"x5	1,250 uL	5.0 ppm

STEP 2: Pipette each volume using the Reference Standard and transfer contents into a clean 10 mL graduated plastic test tube. Rinse the tube and cap first with hexane before using it to clean and remove any phthalates in the plastic.



STEP 3: Dilute to the tube's <u>5 mL line</u> using hexane. Tighten cap and briefly shake contents. Remove cap and pour standard into the calibrator's glass vial. Be sure the glass vial is empty first before doing so. When finished, rinse test tube, cap and pipette tip with solvent to reuse.

Materials included with kit: (5) Glass vials with Calibration Standards

(2) Glass vials with Reference Standard

(5) Plastic graduated test tubes with pipette tips

Other supplies needed:

Hexane solvent. HPLC Grade Solvent dispenser bottle Gilson adjustable micro-pipette

WARNING! CAS#110-54-3 UN #1208

This product contains hexane solvent (>99.99% volume). See Material Safety Data Sheet provided for details.







CERTIFICATE OF ANALYSIS:

Use with EDRO UV Module Only! Part No. 7200-MOD-EDRO

Minimum Detection Limit: 0.1 ppm Upper Linear Limit Range: 10 to 15 ppm

Optimum Blank RFU Range: 5-20

Optimum 5 ppm RFU Range: 3,200-4,000

5 ppm Standard Response: 3,670 RFU

5-Point Calibration Curve Slope: R² 1.00

Preparation Date: MARCH 9, 2022

Expiration Date: **SEPTEMBER 9, 2022**

Lot ID# **219021579** UVF S/N **724000118**

IMPORTANT QA/QC to PERFORM

- Before calibrating, inspect the UV module for dust or damage. The green circuit board, sample well, optical filter and light window should be clean. Be sure to use the proper UV module for analysis or error will occur.
- Use hexane for calibration blank analysis. For best performance, use HPLC or other high laboratory grade solvent. The blank is tested at the beginning of the calibration process. Record the blank's RFU value.
- Rinse the cuvette with hexane in between tests to avoid contamination. Empty solvent into a waste cup. Invert cuvette and tap gently onto dry tissue wipes to drain excess liquid. Wipe outside glass with tissue prior to testing to remove fingerprints or excess liquids.
- After calibration is complete, periodically test one or two of the calibration standards to confirm the curve is linear and to check for instrument drift. Readings should be within 20% of the standard's concentration. If not, recalibrating the analyzer should be performed.
- Ideally, samples should be reported having readings between the lowest and highest calibration standards (0.1 to 5 ppm). Avoid readings above the maximum upper limit (10 to 15 ppm) or quenching may occur. Retest the sample at a higher dilution. Samples with readings between zero and the detection limit are too low. Report result as "Non-Detect" or retest the sample at a lower dilution.
- For long term storage, keep all standards in a cool, dry place or refrigerator when not in use. Store standards upright with caps firmly tightened.
- Do not use product past the 6-month expiration date.

Manufactured By: Sitelab Corporation

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TeLAB GRO Calibration Kit

GASOLINE RANGE ORGANIC HYDROCARBONS

Part No. CAL-025H ● Use with UVF-TRILOGY Analyzer



Reference Standard:

GRO (BTEX) C6-C10 Volatile

Petroleum Compounds Dissolved in Hexane Solvent

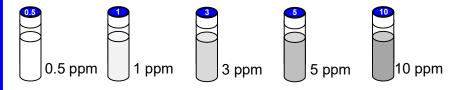
Quantity: 2 Glass Vials; 6 mL Each

Concentration: 25 ppm

Use as a backup for preparing new calibration standards if necessary

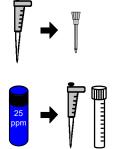
GRO Calibration Standards

Standards contain ready-to-use, concentrated 5 mL volumes dissolved in hexane solvent. Refer to Sitelab's UVF-TRILOGY GRO Calibration Instructions for details.



Calibration Standards Preparation Procedure

Lose or spill your calibrator? Use the following guidelines to prepare your own standards using the Reference Standards and graduated test tubes supplied with this calibration kit:



STEP 1: Attach a disposable pipette tip to the adjustable pipette and adjust the dial to the following volume settings:

Setting:	Volume:	Concentration
"100" "200"	100 uL 200 uL	0.5 ppm 1.0 ppm
"200"x3 "250"x4	600 uL 1.000 uL	3.0 ppm
250 x4 "250"x8	2,000 uL	5.0 ppm 10.0 ppm

STEP 2: Pipette each volume using the Reference Standard and transfer contents into a clean 10 mL graduated plastic test tube. Rinse the tube and cap first with hexane before using it to clean and remove any phthalates in the plastic.



STEP 3: Dilute to the tube's <u>5 mL line</u> using hexane. Tighten cap and briefly shake contents. Remove cap and pour standard into the calibrator's glass vial. Be sure the glass vial is empty first before doing so. When finished, rinse test tube, cap and pipette tip with solvent to reuse.

Materials included with kit: (5) Glass vials with Calibration Standards

- (2) Glass vials with Reference Standard
- (5) Plastic graduated test tubes with pipette tips

Other supplies needed:

Hexane solvent. HPLC Grade Solvent dispenser bottle Gilson adjustable micro-pipette

WARNING! CAS#110-54-3 UN #1208

This product contains hexane solvent (>99.99% volume). See Material Safety Data Sheet provided for details.









Use with GRO UV Module Only! Part No. 7200-MOD-BTEX

Minimum Detection Limit: 0.5 ppm Upper Linear Limit Range: 15 to 20 ppm Optimum Blank RFU Range: 5-20 Optimum 10 ppm RFU Range: 80-100

10 ppm Standard Response: 92 RFU

5-Point Calibration Curve Slope: R² 0.998

Preparation Date: MARCH 9, 2022

Expiration Date: **SEPTEMBER 9, 2022**

Lot ID# 215111062 UVF S/N 724000118

IMPORTANT QA/QC to PERFORM

- Before calibrating, inspect the UV module for dust or damage. The green circuit board, sample well, optical filter and light window should be clean. Be sure to use the proper UV module for analysis or error will occur.
- Use hexane for calibration blank analysis. For best performance, use HPLC or other high laboratory grade solvent. The blank is tested at the beginning of the calibration process. Record the blank's RFU value.
- Rinse the cuvette with hexane in between tests to avoid contamination. Empty solvent into a waste cup. Invert cuvette and tap gently onto dry tissue wipes to drain excess liquid. Wipe outside glass with tissue prior to testing to remove fingerprints or excess liquids.
- After calibration is complete, periodically test one or two of the calibration standards to confirm the curve is linear and to check for instrument drift. Readings should be within 20% of the standard's concentration. If not, recalibrating the analyzer should be performed.
- Ideally, samples should be reported having readings between the lowest and highest calibration standards (0.5 to 10 ppm). Avoid readings above the maximum upper limit (15 to 20 ppm) or quenching may occur. Retest the sample at a higher dilution. Samples with readings between zero and the detection limit are too low. Report result as "Non-Detect" or retest the sample at a lower dilution.
- For long term storage, keep all standards in a cool, dry place or refrigerator when not in use. Store standards upright with caps firmly tightened.
- Do not use product past the 6-month expiration date.

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