

## New Biodiesel & other TPH Standards

### Biodiesels

### TPH Sets

### Individual Fuel & Hydrocarbon Standards

**All Products Produced & Tested under ISO 9001:2000 and ISO 17025 Quality System**

AccuStandard has assembled the following sets to identify specific petroleum product types found during LUFT/LUST investigations. The sets can be purchased using one convenient Cat. No. or as individuals. Other concentrations are listed below.

### Complete Set of Total Petroleum Hydrocarbon (TPH) Pattern Recognition Standards

#### Motor Fuels & Lubricating Oils Set

<u>TPH-001-R1-SET</u>		13 x 1 mL
Each in 20 µg/mL	Solvent	Cat. No.
Regular unleaded	MeOH	GA-001-40X
Regular leaded	MeOH	GA-002-40X
Premium	MeOH	GA-003-40X
RFA Gasoline (oxygenate free)	MeOH	GA-005-40X
#2 Diesel (conventional)	CH <sub>2</sub> Cl <sub>2</sub>	FU-009-D-40X
#1 Diesel (low sulfur)	CH <sub>2</sub> Cl <sub>2</sub>	FU-013-D-40X
#2 Diesel (extra low sulfur)	CH <sub>2</sub> Cl <sub>2</sub>	FU-017-D-40X
Arctic Diesel	CH <sub>2</sub> Cl <sub>2</sub>	FU-023-D-40X
SAE 30 W motor oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-018-D-40X
SAE 40 W motor oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-019-D-40X
SAE 50 W motor oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-021-D-40X
Biodiesel 20 <b>NEW</b>	CH <sub>2</sub> Cl <sub>2</sub>	FU-030-D-40X
Biodiesel 100 <b>NEW</b>	CH <sub>2</sub> Cl <sub>2</sub>	FU-029-D-40X

#### Aviation Fuels & Oils Set

<u>TPH-003-SET</u>		10 x 1 mL
Each in 20 µg/mL	Solvent	Cat. No.
Aviation (gas) Grade 100 LL	CH <sub>2</sub> Cl <sub>2</sub>	GA-004-D-40X
JP-4 Fuel	CH <sub>2</sub> Cl <sub>2</sub>	FU-010-D-40X
JP-5 Fuel	CH <sub>2</sub> Cl <sub>2</sub>	FU-012-D-40X
JP-7 Fuel	CH <sub>2</sub> Cl <sub>2</sub>	FU-014-D-40X
JP-8 Fuel	CH <sub>2</sub> Cl <sub>2</sub>	FU-015-D-40X
JP-10 Fuel (Cruise Missile)	CH <sub>2</sub> Cl <sub>2</sub>	FU-022-D-40X
JP-TS	CH <sub>2</sub> Cl <sub>2</sub>	FU-016-D-40X
Jet Fuel (type 1)	CH <sub>2</sub> Cl <sub>2</sub>	FU-011-D-40X
Turbine (Jet A) Fuel	CH <sub>2</sub> Cl <sub>2</sub>	FU-006-D-40X
Hydraulic oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-020-D-40X

**Heating Fuel Oils Set****TPH-002-R1-SET**

6 x 1 mL

**Each in 20 µg/mL**

	<b>Solvent</b>	<b>Cat. No.</b>
#1 Fuel Oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-001-D-40X
#2 Fuel Oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-002-D-40X
#3 Fuel Oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-003-D-40X
#4 Fuel Oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-004-D-40X
#6 Fuel Oil	CH <sub>2</sub> Cl <sub>2</sub>	FU-008-D-40X
Kerosene	CH <sub>2</sub> Cl <sub>2</sub>	FU-005-D-40X

**Household & Industrial Solvent Set****TPH-004-SET**

5 x 1 mL

**Each in 20 µg/mL**

	<b>Solvent</b>	<b>Cat. No.</b>
Lacquer thinner	CH <sub>2</sub> Cl <sub>2</sub>	HS-001S-D-40X
Mineral spirits	CH <sub>2</sub> Cl <sub>2</sub>	HS-002S-D-40X
Naphtha	CH <sub>2</sub> Cl <sub>2</sub>	HS-003S-D-40X
Turpentine	CH <sub>2</sub> Cl <sub>2</sub>	HS-004S-D-40X
Stoddard	CH <sub>2</sub> Cl <sub>2</sub>	HS-005S-D-40X

**Individual Fuel & Hydrocarbon Standards**

	<b>Concentration</b>		<b>Solvent</b>	<b>Cat. No.</b>
5-alpha Androstane	1	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">GRH-IS</a>
	10	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">GRH-IS-10X</a>
Arctic Diesel Fuel	0.5	mg/mL	MeOH	<a href="#">FU-023</a>
	20	mg/mL	MeOH	<a href="#">FU-023-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-023-D-40X</a>
Aviation (gas) grade 100-LL	0.5	mg/mL	MeOH	<a href="#">GA-004</a>
	20	mg/mL	MeOH	<a href="#">GA-004-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">GA-004-D-40X</a>
Biodiesel 20 <b>NEW</b>	0.5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-030-D</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-030-D-40X</a>
Biodiesel 100 (consumer grade) <b>NEW</b>	0.5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-029-D</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-029-D-40X</a>
p-Bromofluorobenzene	2.5	mg/mL	Acetone	<a href="#">GARH-SS</a>
1-Chloro-4-fluorobenzene	2	mg/mL	MeOH	<a href="#">AK-101.0-IS-10X</a>
1-Chlorooctadecane	1	mg/mL	Hexane	<a href="#">DRH-007-SS</a>
1-Chloro-4-fluorobenzene	1	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">GARH-IS</a>
2,5-Dibromotoluene	50	µg/mL	MeOH	<a href="#">GRH-004-SS</a>
	500	µg/mL	MeOH	<a href="#">GRH-004-SS-10X</a>
	5	mg/mL	MeOH	<a href="#">GRH-004-SS-100X</a>
Diesel Fuel	0.5	mg/mL	MeOH	<a href="#">FU-009</a>
	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-009-D-10X</a>
	20	mg/mL	MeOH	<a href="#">FU-009-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-009-D-40X</a>
#1 Diesel - Low Sulfur	0.5	mg/mL	MeOH	<a href="#">FU-013</a>
	20	mg/mL	MeOH	<a href="#">FU-013-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-013-D-40X</a>

#2 Diesel Fuel	50	mg/mL	Acetone	<a href="#">AK-102-LCS-R1-10X</a>
#2 Diesel Fuel (Extra Low Sulfur)	0.5	mg/mL	MeOH	<a href="#">FU-017</a>
	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-017-D-10X</a>
	5	mg/mL	Acetone	<a href="#">AK-102.0-LCS</a>
	50	mg/mL	Acetone	<a href="#">AK-102.0-LCS-10X</a>
	20	mg/mL	MeOH	<a href="#">FU-017-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-017-D-40X</a>
#2 Diesel Fuel (Low Sulfur) - 25% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FD2-W25-10X</a>
#2 Diesel Fuel (Low Sulfur) - 50% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FD2-W50-10X</a>
#2 Diesel Fuel (Low Sulfur) - 75% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FD2-W75-10X</a>
#2 Diesel Fuel - 25% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FD2-W25-R1-10X</a>
#2 Diesel Fuel - 50% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FD2-W50-R1-10X</a>
#2 Diesel Fuel - 75% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FD2-W75-R1-10X</a>
Docosane	50	% w/w	Toluene	<a href="#">D-5186-91-PM</a>
n-Dodecane	5	mg/mL	MeOH	<a href="#">AS-E0238</a>
	1.5	% w/w	Isooctane	<a href="#">M-GRA-SCS-AS</a>
#1 Fuel oil	0.5	mg/mL	MeOH	<a href="#">FU-001</a>
	20	mg/mL	MeOH	<a href="#">FU-001-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-001-D-40X</a>
#2 Fuel oil	0.5	mg/mL	MeOH	<a href="#">FU-002</a>
	20	mg/mL	MeOH	<a href="#">FU-002-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-002-D-40X</a>
#3 Fuel oil	0.5	mg/mL	Hexane	<a href="#">FU-003</a>
	20	mg/mL	Hexane	<a href="#">FU-003-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-003-D-40X</a>
#4 Fuel oil	0.5	mg/mL	Hexane	<a href="#">FU-004</a>
	20	mg/mL	Hexane	<a href="#">FU-004-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-004-D-40X</a>
#6 Fuel Oil	0.5	mg/mL	Hexane	<a href="#">FU-008</a>
	20	mg/mL	Hexane	<a href="#">FU-008-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-008-D-40X</a>
Gasoline - Regular, unleaded	0.5	mg/mL	MeOH	<a href="#">GA-001</a>
	5	mg/mL	MeOH	<a href="#">GA-001-10X</a>
	20	mg/mL	MeOH	<a href="#">GA-001-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">GA-001-D-40X</a>

Gasoline - Premium	0.5	mg/mL	MeOH	<a href="#">GA-003</a>
	20	mg/mL	MeOH	<a href="#">GA-003-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">GA-003-D-40X</a>
Hydraulic Fluid	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-020-D-40X</a>
Jet Reference Fuel - Type I	0.5	mg/mL	MeOH	<a href="#">FU-011</a>
	20	mg/mL	MeOH	<a href="#">FU-011-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-011-D-40X</a>
JP-4 (Jet Fuel)	0.5	mg/mL	MeOH	<a href="#">FU-010</a>
	20	mg/mL	MeOH	<a href="#">FU-010-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-010-D-40X</a>
JP-5 Fuel	0.5	mg/mL	MeOH	<a href="#">FU-012</a>
	20	mg/mL	MeOH	<a href="#">FU-012-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-012-D-40X</a>
JP-7 Fuel	0.5	mg/mL	MeOH	<a href="#">FU-014</a>
	20	mg/mL	MeOH	<a href="#">FU-014-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-014-D-40X</a>
JP-8 Fuel	0.5	mg/mL	MeOH	<a href="#">FU-015</a>
	20	mg/mL	MeOH	<a href="#">FU-015-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-015-D-40X</a>
JP-TS Aviation Fuel	0.5	mg/mL	MeOH	<a href="#">FU-016</a>
	20	mg/mL	MeOH	<a href="#">FU-016-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-016-D-40X</a>
JP-10 Aviation Fuel	0.5	mg/mL	MeOH	<a href="#">FU-022</a>
	20	mg/mL	MeOH	<a href="#">FU-022-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-022-D-40X</a>
Kerosene - 25% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FK-W25-10X</a>
Kerosene - 50% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FK-W50-10X</a>
Kerosene - 75% Weathered	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FK-W75-10X</a>
Kerosene	0.5	mg/mL	MeOH	<a href="#">FU-005</a>
	20	mg/mL	MeOH	<a href="#">FU-005-40X</a>
	5	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-005-D-10X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-005-D-40X</a>
Lacquer Thinner	1	gram	Neat	<a href="#">HS-001N</a>
	0.5	mg/mL	MeOH	<a href="#">HS-001S</a>
	20	mg/mL	MeOH	<a href="#">HS-001S-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">HS-001S-D-40X</a>
Mineral Spirits	1	gram	Neat	<a href="#">HS-002N</a>
	0.5	mg/mL	MeOH	<a href="#">HS-002S</a>
	20	mg/mL	MeOH	<a href="#">HS-002S-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">HS-002S-D-40X</a>

Naphtha	1	gram	Neat	<a href="#">HS-003N</a>
	0.5	mg/mL	MeOH	<a href="#">HS-003S</a>
	20	mg/mL	MeOH	<a href="#">HS-003S-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">HS-003S-D-40X</a>
Nonatriacontane	750	µg/mL	Chloroform	<a href="#">DRH-FL-SS-R1</a>
	1	mg/mL	CS <sub>2</sub>	<a href="#">DRH-FL-SS</a>
	3	mg/mL	CS <sub>2</sub>	<a href="#">DRH-FL-SS-3X</a>
n-Pentadecane	5	mg/mL	MeOH	<a href="#">AS-E0241</a>
RFA Gasoline (oxygenate-free)	0.5	mg/mL	MeOH	<a href="#">GA-005</a>
	20	mg/mL	MeOH	<a href="#">GA-005-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">GA-005-D-40X</a>
RFA Gasoline	10	mL	NEAT	<a href="#">RFA-BLNK-10ML</a>
SAE 5W30 Motor Oil	0.5	mg/mL	Hexane	<a href="#">FU-025-H</a>
	20	mg/mL	Hexane	<a href="#">FU-025-H-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-025-D-40X</a>
SAE 10W30 Motor Oil	0.5	mg/mL	Hexane	<a href="#">FU-026-H</a>
	20	mg/mL	Hexane	<a href="#">FU-026-H-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-026-D-40X</a>
SAE 10W40 Motor Oil	0.5	mg/mL	Hexane	<a href="#">FU-027-H</a>
	20	mg/mL	Hexane	<a href="#">FU-027-H-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-027-D-40X</a>
SAE 20W50 Motor Oil	0.5	mg/mL	Hexane	<a href="#">FU-028-H</a>
	20	mg/mL	Hexane	<a href="#">FU-028-H-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-028-D-40X</a>
SAE 30W Motor Oil	0.5	mg/mL	Hexane	<a href="#">FU-018-H</a>
	20	mg/mL	Hexane	<a href="#">FU-018-H-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-018-D-40X</a>
SAE 40W Motor Oil	0.5	mg/mL	Hexane	<a href="#">FU-019-H</a>
	5	mg/mL	Acetone	<a href="#">AK-103.0-LCS</a>
	20	mg/mL	Hexane	<a href="#">FU-019-H-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-019-D-40X</a>
	25	mg/mL	Acetone:CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">AK-103.0-LCS-5X</a>
SAE 50W Motor Oil	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-021-D-40X</a>
Stoddard solvent	1	gram	Neat	<a href="#">HS-005N</a>
	0.5	mg/mL	MeOH	<a href="#">HS-005S</a>
	5	mg/mL	MeOH	<a href="#">HS-005S-10X</a>
	20	mg/mL	MeOH	<a href="#">HS-005S-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">HS-005S-D-40X</a>
o-Terphenyl	200	µg/mL	Acetone	<a href="#">AK-102.0-SS</a>

	1	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">DRH-006-SS</a>
	2	mg/mL	Acetone	<a href="#">AK-102.0-SS-10X</a>
	2	mg/mL	Acetone	<a href="#">GRH-SS</a>
n-Tetradecane	5	mg/mL	MeOH	<a href="#">AS-E0240</a>
Tetracosane (5 mL)	500	µg/mL	CS <sub>2</sub>	<a href="#">D-5480-C40-5ML</a>
	500	µg/mL	Chloroform	<a href="#">D-5480-C40-R1-5ML</a>
n-Tridecane	5	mg/mL	MeOH	<a href="#">AS-E0239</a>
1,2,3-Trimethylbenzene	1	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">V-028S-D-10X</a>
n-Triacontane-d62	500	µg/mL	Acetone	<a href="#">AK-103.0-SS</a>
	5	mg/mL	Acetone:THF (3:1)	<a href="#">AK-103.0-SS-10X</a>
	5	mg/mL	THF	<a href="#">DRH-SS</a>
Turbine (Jet) fuel	0.5	mg/mL	MeOH	<a href="#">FU-006</a>
	20	mg/mL	MeOH	<a href="#">FU-006-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">FU-006-D-40X</a>
Turpentine	1	gram	Neat	<a href="#">HS-004N</a>
	0.5	mg/mL	MeOH	<a href="#">HS-004S</a>
	20	mg/mL	MeOH	<a href="#">HS-004S-40X</a>
	20	mg/mL	CH <sub>2</sub> Cl <sub>2</sub>	<a href="#">HS-004S-D-40X</a>
Unleaded Gasoline - 25% Weathered	5	mg/mL	MeOH	<a href="#">GA-W25-10X</a>
Unleaded Gasoline - 50% Weathered	5	mg/mL	MeOH	<a href="#">GA-W50-10X</a>
Unleaded Gasoline - 75% Weathered	5	mg/mL	MeOH	<a href="#">GA-W75-10X</a>