# REFERENCE STANDARDS | ENVIRONMENTAL MATERIALS

# **UST Monitoring**

Petroleum Volatile Organic Compounds (PVOC), Gasoline Range Organics (GRO), & Benzene-Toluene-Ethylbenzene-Xylenes (BTEX) cont'd

#### Gasoline Component Standard (10 components)

| benzene                    | 500µg/mL       | 1,2,4-trimethylbenzene | 1,000 |
|----------------------------|----------------|------------------------|-------|
| ethylbenzene               | 500            | 2,2,4-trimethylpentane | 1,500 |
| heptane                    | 500            | <i>m</i> -xylene       | 1,000 |
| 2-methylpentane            | 1,500          | <i>o</i> -xylene       | 1,000 |
| toluene                    | 1,500          | <i>p</i> -xylene       | 1,000 |
| 10,000µg/mL total in P&T m | ethanol, 1mL/a | mpul                   |       |

cat. # 30486 (ea.)

## Certified BTEX in Unleaded Gas Composite Standard

(9 components)

Certified for:

benzene\* toluene\* ethylbenzene\* m-xylene\* isopropyl benzene\* o-xylene\* methyl tert-butyl ether (MTBE)\* p-xylene\* naphthalene\*

5,500ppm gasoline in P&T methanol, 1mL/ampul cat. # 30237 (ea.)

### **Certified Aromatics in Gasoline (16 components)**

#### Certified for:

benzene\* *n*-propylbenzene\* ethylbenzene\* toluene\*

m-ethyltoluene\* 1,2,3-trimethylbenzene\* o-ethyltoluene\* 1,2,4-trimethylbenzene\* p-ethyltoluene\* 1,3,5-trimethylbenzene\* isopropylbenzene\* m-xylene\*

methyl tert-butyl ether (MTBE)\* o-xylene\* naphthalene\* p-xylene\*

5,500ppm gasoline in P&T methanol, 1mL/ampul cat. # 30485 (ea.)

<sup>\*</sup>Concentration differs lot-to-lot. See on-line Certificate of Analysis for certified concentrations.



# Certified PAHs in Diesel (7 components)

#### Certified PAHs

acenaphthene\* 2-methylnaphthalene\* acenaphthylene\* naphthalene\* fluorene\* phenanthrene\* 1-methylnaphthalene\*

50,000ppm diesel #2 in methylene chloride, 1mL/ampul cat. # 31673 (ea.) \$63

# Gasoline Surrogate and Internal Standards

Volume is 1mL/ampul. Concentration is  $\mu g/mL$ .

| Compound                                 | Solvent | Conc.  | cat.# (ea.) | price |
|--|---------|--------|-------------|-------|
| 4-bromofluorobenzene                     | PTM     | 2,500  | 30067       |       |
| 4-bromofluorobenzene                     | PTM     | 10,000 | 30082       |       |
| 1-chlorooctane                           | PTM     | 10,000 | 30084       |       |
| α,α,α-trifluorotoluene                   | PTM     | 2,500  | 30068       |       |
| $\alpha,\alpha,\alpha$ -trifluorotoluene | PTM     | 10,000 | 30083       |       |

#### Recommended Internal Standard (PID) for EPA GRO Method

| Compound                 | Solvent | Conc. | cat.# (ea.) | price |  |
|--------------------------|---------|-------|-------------|-------|--|
| 1-chloro-4-fluorobenzene | PTM     | 2 500 | 30066       |       |  |

PTM = Purge & trap grade methanol

# Diesel Surrogate and Internal Standards

Volume is 1mL/ampul. Concentration is  $\mu g/mL$ .

| Compound            | Solvent | Conc.  | cat.# (ea.) | price |
|---------------------|---------|--------|-------------|-------|
| 1-chlorooctadecane  | D       | 10,000 | 31098       |       |
| 2-fluorobiphenyl    | D       | 10,000 | 31096       |       |
| o-terphenyl         | D       | 10,000 | 31097       |       |
| <i>p</i> -terphenyl | D       | 10,000 | 31095       |       |

#### **Recommended Internal Standards**

| Compound       | Solvent | Conc. | cat.# (ea.) | price |
|----------------|---------|-------|-------------|-------|
| 5-α-androstane | D       | 2,000 | 31065       |       |
| o-terphenyl    | Α       | 2,000 | 31066       |       |

A = acetone; D = methylene chloride

# Diesel/Biodiesel Standard

# Diesel/Biodiesel 80:20 Blend Standard

The biodiesel component is methyl soyate.  $5,000\mu g/mL$  in methylene chloride, 1mL/ampul

cat. # 31880 (ea.)



ASTM Method D6584-00 and EN14105 Biodiesel Standards.









<sup>\*</sup>Concentration differs lot-to-lot. See on-line Certificate of Analysis for certified concentrations.

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