

New Environmental and Petroleum Reference Mixes; Glass Deactivation Solution



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Environmental Reference Materials

Carbamate Calibration Mix for HPLC / Post-Column Derivatization **new**

- ✓ Complete set of materials for N-methylcarbamoyloximes and N-methylcarbamates.
- ✓ New mix satisfies latest update of EPA method (531.2).
- ✓ Formulated in acetonitrile for stability and convenience for HPLC analysis.

Because carbamates, especially aldicarb sulfone, are unstable, carbamate analyses usually are HPLC based. The US EPA method for monitoring these compounds in drinking water, Method 531, calls for HPLC with post-column derivatization. 1-Naphthol, a fluorescent metabolite of carbaryl, was added to the analyte list in 2003. Our new 531.2 Carbamate Pesticides Calibration Mixture includes 1-naphthol. We offer the internal standard, 4-bromo-3,5-dimethylphenyl N-methylcarbamate, (cat.# 32274) and the performance check mix (cat.# 32275) in our current catalog.

531.2 Carbamate Pesticide Calibration

Mixture		
aldicarb	methiocarb	
aldicarb sulfone	methomyl	
aldicarb sulfoxide	1-naphthol	
carbaryl (sevin)	oxamyl	
carbofuran	propoxur (Baygon®)	
3-hydroxycarbofuran		
100µg/mL in acetonitrile, 1mL/ampul		
Each	5-pk.	10-pk.
32435	32435-510	—
w/data pack		
32435-500	32435-520	32535

Formaldehyde-DNPH Mix **new**

- ✓ High concentration
- ✓ Acetonitrile solvent—suitable for HPLC analysis.

Sampling for airborne carbonyl compounds in EPA Method TO-11A and other methods involves a reaction between the target compounds and 2,4-dinitrophenylhydrazine (DNPH), coated on a silica gel adsorbent. We recently introduced a 15-component aldehyde/ketone-DNPH calibration mix (cat.# 31808). To meet the needs of investigators analyzing only for formaldehyde, we offer this new formulation.

Formaldehyde-DNPH Mix

formaldehyde-DNPH	
500µg/mL in acetonitrile, 1mL/ampul	
Each	5-pk.
31837	31837-510

Petroleum Reference Materials

Massachusetts Volatile Petroleum Hydrocarbons (VPH) Mixes **new**

- ✓ New standard and matrix spike mixes for current Massachusetts VPH method: surrogate included.
- ✓ More analyses per ampul—standard with surrogate is 10,000µg/mL.
- ✓ Matrix spike mix at 50µg/mL, per updated method.

We include the two new target compounds in the latest revision of the Massachusetts MA VPH Method, *n*-decane and *n*-butylcyclohexane, in our new mixes. We also include the recommended surrogate standard, 2,5-dibromotoluene, in both mixes. A commercial gasoline reference standard suitable for the method is available from our catalog (cat.# 30096).

MA VPH Standard with Surrogate (Revised)

benzene	<i>n</i> -nonane (C9)	
<i>n</i> -butylcyclohexane	<i>n</i> -pentane (C5)	
<i>n</i> -decane (C10)	toluene	
2,5-dibromotoluene	1,2,4-trimethylbenzene	
ethylbenzene	2,2,4-trimethylpentane (isooctane)	
2-methylpentane	<i>m</i> -xylene	
methyl <i>tert</i> -butyl ether (MTBE)	<i>o</i> -xylene	
naphthalene	<i>p</i> -xylene	
10,000µg/mL in P&T methanol, 1mL/ampul		
Each	5-pk.	10-pk.
30604	30604-510	—
w/data pack		
30604-500	30604-520	30704

MA VPH Matrix Spike Mix with Surrogate (Revised)

benzene	<i>n</i> -pentane (C5)	
<i>n</i> -butylcyclohexane	toluene	
<i>n</i> -decane (C10)	1,2,4-trimethylbenzene	
2,5-dibromotoluene	2,2,4-trimethylpentane (isooctane)	
ethylbenzene	<i>m</i> -xylene	
2-methylpentane	methyl <i>tert</i> -butyl ether (MTBE)	
methyl <i>tert</i> -butyl ether (MTBE)	<i>o</i> -xylene	
naphthalene	<i>p</i> -xylene	
<i>n</i> -nonane (C9)		
50µg/mL in P&T methanol, 1mL/ampul		
Each	5-pk.	10-pk.
30605	30605-510	—
w/data pack		
30605-500	30605-520	30705

Hydraulic Oil Standard **new**

- ✓ For total petroleum hydrocarbon pattern recognition of hydraulic oil.
- ✓ High concentration—50,000µg/mL in methylene chloride.

Regardless of source or quality, the fingerprint of all hydraulic oils is essentially the same. We now offer a high concentration hydraulic oil reference mix to help our customers identify petroleum products associated with hydraulic oil.

Hydraulic Oil Standard

hydraulic oil		
50,000µg/mL in methylene chloride, 1mL/ampul		
Each	5-pk.	10-pk.
31839	31839-510	—
w/data pack		
31839-500	31839-520	31939

Creosote Oil Standard **new**

- ✓ For total petroleum hydrocarbon pattern recognition of creosote oil.
- ✓ High concentration—50,000µg/mL in methylene chloride.

Creosote oil, a widely used wood preservative produced by distilling coal tar, contains chemicals that are classified as carcinogens (e.g., benzo(a)pyrene). New regulations in Europe ban the sale of creosote to consumers. We offer this new, high concentration standard to analysts monitoring creosote oil.

Creosote Oil Standard

creosote oil		
50,000µg/mL in methylene chloride, 1mL/ampul		
Each	5-pk.	10-pk.
31838	31838-510	—
w/data pack		
31838-500	31838-520	31938

Deactivation Reagent **new**

- ✓ Easy deactivation of liners and other glass surfaces.
- ✓ Convenient—20mL ampul deactivates 50 inlet liners.
- ✓ Tested to ensure consistent quality and effectiveness.

Restek now offers dimethyldichlorosilane (DMDCS), for deactivating liners and other glassware. Simply dilute the neat material to a 5% solution in toluene, soak the glass item(s) in the solution for 15 minutes, and rinse with toluene and methanol. DMDCS reacts with active hydroxyl groups on the glass surface producing a deactivated surface. A detailed procedure is included with the product.



Dimethyldichlorosilane (DMDCS)

dimethyldichlorosilane (DMDCS)		
Neat, 20mL/ampul		
Each	5-pk.	
31840	31840-510	