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1+ year of service!

### ASTM Method D4059-96 (PCB Standards in Oil)

ASTM Method D4059-96 is used for determining PCB concentrations in various types of transformer oil, using GC/ECD detection. The analyst must dilute transformer oil samples in a solvent prior to injection. The oil in the sample has been shown to quench the ECD. Calibration mixtures of PCBs in transformer oil must be prepared and diluted identically to eliminate the detector quenching bias resulting when samples are analyzed.

We prepare these solutions in a mineral oil-based transformer oil (Exxon® Univolt® N-61), which has been tested to ensure it is PCB-free.

#### PCB-Free Transformer Oil

Neat

5mL cat. # 32424 (ea.)

50mL cat. # 32425 (ea.)

No data pack available.

#### Aroclor Standards

Compound	cat.# (ea.)
50mg/kg in transformer oil (PCB-free)	
Aroclor 1016	32075
Aroclor 1221	32077
Aroclor 1232	32079
Aroclor 1242	32081
Aroclor 1248	32083
Aroclor 1254	32085
Aroclor 1260	32087
500mg/kg in transformer oil (PCB-free)	
Aroclor 1016	32076
Aroclor 1221	32078
Aroclor 1232	32080
Aroclor 1242	32082
Aroclor 1248	32084
Aroclor 1254	32086
Aroclor 1260	32088

### ASTM Method D5197 (Formaldehyde and Other Carbonyl Compounds in Air)

#### CARB 1004 Aldehyde/Ketone-DNPH **new!** Calibration Standard (13 components)

acetaldehyde-2,4-DNPH	hexaldehyde-2,4-DNPH
acetone-2,4-DNPH	methacrolein-2,4-DNPH
acrolein-2,4-DNPH	methyl ethyl ketone-2,4-DNPH
benzaldehyde-2,4-DNPH	propionaldehyde-2,4-DNPH
<i>n</i> -butyraldehyde-2,4-DNPH	<i>m</i> -tolualdehyde-2,4-DNPH
crotonaldehyde-2,4-DNPH	valeraldehyde-2,4-DNPH
formaldehyde-2,4-DNPH	

3µg/mL each in acetonitrile, 1mL/ampul  
cat. # 33093 (ea.)

### ASTM Method D5197 (Formaldehyde and Other Carbonyl Compounds in Air) *cont'd*

#### DNPH Reference Materials

Compound	cat.# (ea.)
100µg/mL in acetonitrile, 1mL/ampul	
acetaldehyde-2,4-DNPH	33074
acetone-2,4-DNPH	33075
acrolein-2,4-DNPH	33076
benzaldehyde-2,4-DNPH	33077
2-butanone-2,4-DNPH	33078
<i>n</i> -butyraldehyde-2,4-DNPH	33079
crotonaldehyde-2,4-DNPH	33080
2,5-dimethylbenzaldehyde-2,4-DNPH	33081
formaldehyde-2,4-DNPH	33082
glycolaldehyde-2,4-DNPH	33091
hexaldehyde-2,4-DNPH	33083
isobutyraldehyde-2,4-DNPH	33084
isovaleraldehyde-2,4-DNPH	33085
methacrolein-2,4-DNPH	33095
propionaldehyde-2,4-DNPH	33086
<i>m</i> -tolualdehyde-2,4-DNPH	33088
<i>o</i> -tolualdehyde-2,4-DNPH	33087
<i>p</i> -tolualdehyde-2,4-DNPH	33089
valeraldehyde-2,4-DNPH	33090

### ASTM Method D5836-03 / OSHA 42, OSHA 47, NIOSH 5522 (Analysis of Isocyanates in Indoor Air by HPLC)

ASTM D5836 and OSHA 42 are test methods for determining 2,4-toluene diisocyanate (2,4-TDI) and 2,6-TDI in the workplace atmosphere. OSHA 47 is for 4,4'-methylenediphenyl isocyanate (4,4'-MDI) in indoor air, and NIOSH Method 5522 is an analysis for 2,4-TDI, 2,6-TDI, 4,4'-MDI, and 1,6-hexamethylene diisocyanate (1,6-HDI) in air. Restek offers the 1, -(2-pyridyl)piperazine (1-2pp) derivative.

#### Isocyanates Singles

Compound	cat.# (ea.)
1,000µg/mL in dimethyl sulfoxide, 1mL/ampul	
2,6-TDIP	33000
2,4-TDIP	33001
1,6-HDIP	33002
4,4'-MDIP	33003

#### Formaldehyde Oxazoladine

2,000µg/mL in toluene, 1mL/ampul  
cat. # 33004 (ea.)

### free data

Available on Our Website: Lot Certificates, Data Packs, and MSDSs

For complete information detailing manufacturing and testing for Restek inventoried reference standards, visit our website at [www.restek.com](http://www.restek.com). To view lot certificates and/or an MSDS, enter the catalog number of the product in the Search feature. For a free data pack (Adobe® PDF file), enter the catalog number and lot number of the product.