Method 609 (Nitroaromatics/Isophorone)

609 Nitroaromatics & Isophorone Calibration Mix

2,4-dinitrotoluene
2,6-dinitrotoluene
isophorone
nitrobenzene

2,000µg/mL each in hexane, 1mL/ampul
cat. # 31033 (ea.)

Method 610 (Polycyclic Aromatic Hydrocarbons [PAHs])

SV Calibration Mix #5 / 610 PAH Mix

(16 components)

acenaphthene
acenaphthylene
anthracene
benzo(a)anthracene
benzo(a)pyrene
benzo(b)fluoranthene
benzo(k)fluoranthene
benzo(ghi)perylene
chrysene
dibenzo(a,h)anthracene
fluoranthene
fluorene
indeno(1,2,3-cd)pyrene
naphthalene
phenanthrene
pyrene

2,000µg/mL each in methylene chloride, 1mL/ampul
cat. # 31011 (ea.)

610 PAH Calibration Mix A (16 components)

For HPLC/fluorescence detection.

	1000µg/mL		
acenaphthene		chrysene	500
acenaphthylene	1000	dibenzo(a,h)anthracene	500
anthracene	1000	fluoranthene	500
benzo(a)anthracene	500	fluorene	1000
benzo(a)pyrene	500	indeno(1,2,3-cd)pyrene	500
benzo(b)fluoranthene	500	naphthalene	1000
benzo(k)fluoranthene	500	phenanthrene	500
benzo(ghi)perylene	500	pyrene	500

In methylene chloride, 1mL/ampul
cat. # 31264 (ea.)

610 PAH Calibration Mix B (16 components)

For HPLC/UV detection.

	1000µg/mL		
acenaphthene		chrysene	100
acenaphthylene	2000	dibenzo(a,h)anthracene	200
anthracene	100	fluoranthene	200
benzo(a)anthracene	100	fluorene	200
benzo(a)pyrene	100	indeno(1,2,3-cd)pyrene	100
benzo(b)fluoranthene	200	naphthalene	1000
benzo(k)fluoranthene	100	phenanthrene	100
benzo(ghi)perylene	200	pyrene	100

In methylene chloride:methanol (1:1), 1mL/ampul
cat. # 31455 (ea.)

Method 611 (Haloethers)

611 Haloethers Calibration Mix

bis(2-chloroethoxy)methane
bis(2-chloroethyl)ether
bis(2-chloroisopropyl)ether
4-bromophenyl phenyl ether
4-chlorophenyl phenyl ether

2,000µg/mL each in acetone, 1mL/ampul
cat. # 31034 (ea.)

Method 612 (Chlorinated Hydrocarbons)

612 Chlorinated Hydrocarbons Calibration Mix

(9 components)

2-chloronaphthalene
1,2-dichlorobenzene
1,3-dichlorobenzene
1,4-dichlorobenzene
hexachlorobenzene
hexachlorobutadiene
hexachlorocyclopentadiene
hexachloroethane
1,2,4-trichlorobenzene

2,000µg/mL each in isooctane, 1mL/ampul
cat. # 31035 (ea.)

Method 615 (Chlorinated Acid Herbicides)

Herbicide Surrogate

Free Acid Form:

2,4-dichlorophenylacetic acid (DCAA)

200µg/mL in methanol, 1mL/ampul
cat. # 32049 (ea.)

1,000µg/mL in acetone, 1mL/ampul
cat. # 32439 (ea.)

Derivatized Form:

2,4-dichlorophenyl acetic acid methyl ester (DCAA methyl ester)

200µg/mL in hexane, 1mL/ampul
cat. # 32050 (ea.)

Herbicide Mix #1 (7 components)

Free Acid Form:

2,4-D
2,4-DB
2,4,5-T
2,4,5-TP
dicamba
dichlorprop
dinoseb

200µg/mL each in methanol, 1mL/ampul
cat. # 32054 (ea.)

Derivatized Form:

2,4-D methyl ester
2,4-DB methyl ester
2,4,5-T methyl ester
2,4,5-TP methyl ester
dicamba methyl ester
dichlorprop methyl ester
dinoseb methyl ether

200µg/mL each in hexane, 1mL/ampul
cat. # 32055 (ea.)

Herbicide Mix #2

Free Acid Form:

dalapon

2,000µg/mL in methanol, 1mL/ampul
cat. # 32056 (ea.)

Derivatized Form:

dalapon methyl ester

2,000µg/mL in hexane, 1mL/ampul
cat. # 32057 (ea.)

Herbicide Mix #3

Free Acid Form:

MCPA
MCPP

20,000µg/mL each in methanol, 1mL/ampul
cat. # 32058 (ea.)

Derivatized Form:

MCPA methyl ester
MCPP methyl ester

20,000µg/mL each in hexane, 1mL/ampul
cat. # 32059 (ea.)

also available

Additional chlorinated acid herbicides mixes:

see Method 555, **page 453** and Method 8321, **page 470**

dependable execution

Chris has given the Analytical Reference Materials Group invaluable feedback on many new reference materials for environmental applications, and is always ready to help with redesigning mixes to meet changes in methods or to improve shelf life. In addition, he runs many applications that appear in Restek *Advantage* newsletter articles, to help promote awareness of new mixes.

Chris English,
Innovations Group Leader