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# APHA AWWA WEF Standard Methods

Environmental & Water Standards

August 2014

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# Reagents and Standards as per Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF

## Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF

### Reagent Water referenced in APHA, AWWA & WEF

| Chapter | Product No. | Description | Pack Size |
|---|---|---|---|
| 1080.B.1 | ISTOC1154 | USP Reagent Water | 1L |

### Analytical Volumetric Solutions referenced in APHA, AWWA & WEF

| Chapter | Product No. | Description | Pack Size |
|---|---|---|---|
| 2310.B.3c | S20101 | Analytical Volumetric Solution Sodium Hydroxide 0.1N, 0.1M | 1L |
| 2310.B.3d | S20021 | Analytical Volumetric Solution Sodium Hydroxide 0.02N, 0.02M | 1L |
| 2310.B.3h | IPT10W | Indicator Phenolphthalein Alcoholic Solution 1.0% | 2.5L |
| 2310.B.3i | T20101 | Analytical Volumetric Solution Sodium Thiosulphate 0.1N, 0.1M | 1L |
| 2320.B.3b | SU20051 | Analytical Volumetric Solution Sulphuric Acid 0.1N, 0.05M | 1L |
| 2320.B.3b | H20101 | Analytical Volumetric Solution Hydrochoric Acid 0.1N, 0.1M | 1L |
| 2320.B.3c | SU20011 | Analytical Volumetric Solution Sulphuric Acid 0.02N, 0.01M | 1L |
| 2320.B.3c | H20021 | Analytical Volumetric Solution Hydrochoric Acid 0.02N, 0.02M | 1L |
| 2320.B.3d | BRCG1501 | Bromocresol Green, 1% Solution | 100ml |
| 2320.B.3e | 1012602 | European Pharmacopoeia Reagent Bromocresol Green - Methyl Red Mixed Indicator | 100ml |
| 2340.C.2d | ED20011 | Analytical Volumetric Solution EDTA (DiSodium salt) 0.02N, 0.01M | 1L |
| 2350.B.3e | ST1001 | Starch Solution 1% | 1L |
| 2350.B.3g | SH5WV1 | Sodium Hypochlorite 5% w/v | 1L |


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## Analytical Volumetric Solutions referenced in APHA, AWWA & WEF

| Chapter | Product No. | Description | Pack Size |
|---|---|---|---|
| 3500-K.C.3d | S26001 | Analytical Volumetric Solution Sodium Hydroxide 6M, 6N | 1L |
| 3500-K.C.3e | ISTOC1154 | USP Reagent Water | 1L |
| 4500-Cl.B.2c | T20101 | Analytical Volumetric Solution Sodium Thiosulphate 0.1N, 0.1M | 1L |
| 4500-Cl.B.2c | ST1001 | Starch Solution 1% | 1L |
| 4500-Cl.B.2d | T20011 | Analytical Volumetric Solution Sodium Thiosulphate 0.01N, 0.01M | 1L |
| 4500-Cl.B.2f | I2005F | Analytical Volumetric Solution Iodine 0.1N, 0.05M | 1L |
| 4500-$Cl^-$.B.3a | PCS5 | Indicator Solution Potassium chromate, 5% | 500ml |
| 4500-$Cl^-$.B.3b | N20014W | Analytical Volumetric Solution Silver Nitrate 0.0141N, 0.0141M | 2.5L |
| 4500-$Cl^-$.B.3d | IPT10F | Indicator Phenolphthalein 1% Phenolphthalein Solution | 1L |
| 4500-$Cl^-$.B.3d | S21001 | Analytical Volumetric Solution Sodium Hydroxide 1.0N, 1.0M | 1L |
| 4500-$Cl^-$.B.3d | SU20501 | Analytical Volumetric Solution Sulphuric Acid 1.0N, 0.5M | 1L |
| 4500-$H^+$.B.3d | S20101 | Analytical Volumetric Solution Sodium Hydroxide 0.1N, 0.1M | 1L |
| 4500-$H^+$.B.3d | H20101 | Analytical Volumetric Solution Hydrochoric Acid 0.1N, 0.1M | 1L |
| 4500-$H^+$.B.3d | H25001 | Analytical Volumetric Solution Hydrochloric Acid 5N, 5M | 1L |
| 4500-O.C.2d | 1085103 | European Pharmacopoeia Reagent Starch Solution | 100ml |
| 4500-O.C.2f | SU23005 | Analytical Volumetric Solution Sulphuric Acid 3.0M, 6.0N | 5L |
| 4500-O.D.2a | 1070902 | European Pharmacopoeia Reagent Potassium Permanganate Solution | 1L |
| 4500-P.D.3c | AMBS01 | Ammonium Molybdate Solution | 100ml |
| 4500-P.D.3d | 1085001 | European Pharmacopoeia Reagent Stannous Chloride Solution | 100ml |
| 4500-$S^{2-}$.F.1a | H26001 | Analytical Volumetric Solution Hydrochloric Acid 6.0N, 6.0M | 1L |
| 5210.B.3a | S30WW1 | Sodium Hydroxide 30% w/w (40% w/v) | 1L |
| 5210.B.3c | CACLSS01 | Calcium Chloride Stock Solution | 1L |
| 5210.B.3i | USP0701 | USP Solution Ammonium Chloride TS Conforms to USP 34 | 100ml |
| 5530.B.3b | M004F | Indicator Solution Methyl Orange, 0.04% | 500ml |
| 5530.B.3c | S22501 | Analytical Volumetric Solution Sodium Hydroxide 2.5N, 2.5M | 1L |
| 6610.B.4c | S20051 | Analytical Volumetric Solution Sodium Hydroxide 0.05N, 0.05M | 1L |

## Kjeldahl Reagents referenced in APHA, AWWA & WEF

| Chapter | Product No. | Description | Pack Size |
|---|---|---|---|
| 4500-Norg.B.3b | ST841 | Kjeldahl Reagent 40% w/v Sodium Hydroxide/8% Sodium Thiosulphate | 5L |
| 4500-Norg.B.3d | S26001 | Analytical Volumetric Solution Sodium Hydroxide 6M, 6N | 1L |

## TOC standards referenced in APHA, AWWA & WEF

| Chapter | Product No. | Description | Pack Size |
|---|---|---|---|
| 5310.B.3a | ISTOC1154 | USP Reagent Water | 1L |


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## Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 2000 Physical and Aggregate Properties, 2120 Colour
## ASTM Colour Standards

| Product No. | Description | Colour | APHA, ACS and ASTM Methods to include the following | Pack Size |
|---|---|---|---|---|
| ASTMA101 | ASTM Colour Standard Sample A1 | 1 | D6045,D1500 | 100ml |
| ASTMA105 | ASTM Colour Standard Sample A1 | 1 | D6045,D1500 | 500ml |
| ASTMA301 | ASTM Colour Standard Sample A3 | 3 | D6045,D1500 | 100ml |
| ASTMA305 | ASTM Colour Standard Sample A4 | 3 | D6045,D1500 | 500ml |
| ASTMA501 | ASTM Colour Standard Sample A5 | 5 | D6045,D1500 | 100ml |
| ASTMA505 | ASTM Colour Standard Sample A5 | 5 | D6045,D1500 | 500ml |
| ASTMA701 | ASTM Colour Standard Sample A7 | 7 | D6045,D1500 | 100ml |
| ASTMA705 | ASTM Colour Standard Sample A7 | 7 | D6045,D1500 | 500ml |

## Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 2000 Physical and Aggregate Properties, 2120 Colour
## Saybolt Colour Standards

| Product No. | Description | Colour | APHA, ACS and ASTM Methods to include the following | Pack Size |
|---|---|---|---|---|
| SAYP301 | Saybolt Colour +30 | S+30 | D6045 | 100ml |
| SAYP305 | Saybolt Colour +30 | S+30 | D6045 | 500ml |
| SAYP251 | Saybolt Colour +25 | S+25 | D6045 | 100ml |
| SAYP255 | Saybolt Colour +25 | S+25 | D6045 | 500ml |
| SAYP191 | Saybolt Colour +19 | S+19 | D6045 | 100ml |
| SAYP195 | Saybolt Colour +19 | S+19 | D6045 | 500ml |
| SAYP151 | Saybolt Colour +15 | S+15 | D6045 | 100ml |
| SAYP155 | Saybolt Colour +15 | S+15 | D6045 | 500ml |
| SAYP121 | Saybolt Colour +12 | S+12 | D6045 | 100ml |
| SAYP125 | Saybolt Colour +12 | S+12 | D6045 | 500ml |
| SAYP01 | Saybolt Colour +0 | S0 | D6045 | 100ml |
| SAYP05 | Saybolt Colour +0 | S0 | D6045 | 500ml |
| SAYN151 | Saybolt Colour -15 | S-15 | D6045 | 100ml |
| SAYN155 | Saybolt Colour -15 | S-15 | D6045 | 500ml |


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## Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF.
## Part 2000 Physical and Aggregate Properties 2120 Colour

### Platinum-Cobalt Colour Standards* (Hazen)

| Product No. | Description | Colour | APHA, ACS and ASTM Methods to include the following | Pack Size |
|---|---|---|---|---|
| HAZ0 | Platinum-Cobalt Colour 0 | 0 | D1209 | 1000ml |
| HAZ5 | Platinum-Cobalt Colour 5 | 5 | D1209 | 1000ml |
| HAZ10 | Platinum-Cobalt Colour 10 | 10 | D1209 | 1000ml |
| HAZ25 | Platinum-Cobalt Colour 25 | 25 | D1209 | 1000ml |
| HAZ40 | Platinum-Cobalt Colour 40 | 40 | D1209 | 1000ml |
| HAZ50 | Platinum-Cobalt Colour 50 | 50 | D1209 | 1000ml |
| HAZ80 | Platinum-Cobalt Colour 80 | 80 | D1209 | 1000ml |
| HAZ100 | Platinum-Cobalt Colour 100 | 100 | D1209 | 1000ml |
| HAZ250 | Platinum-Cobalt Colour 250 | 250 | D1209 | 1000ml |
| HAZ500 | Platinum-Cobalt Colour 500 | 500 | D1209 | 1000ml |

* Standards with intermediate Platinum-Cobalt values are available on request

## Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF.
## Part 2000 Physical and Aggregate Properties 2120 Colour

### Gardner Colour Standards**

| Product No. | Description | Colour | APHA, ACS and ASTM Methods to include the following | Pack Size |
|---|---|---|---|---|
| GARD02 | Gardner Colour 2 | 2 | D6166 | 500ml |
| GARD021 | Gardner Colour 2 | 2 | D6166 | 100ml |
| GARD04 | Gardner Colour 4 | 4 | D6166 | 500ml |
| GARD041 | Gardner Colour 4 | 4 | D6166 | 100ml |
| GARD06 | Gardner Colour 6 | 6 | D6166 | 500ml |
| GARD061 | Gardner Colour 6 | 6 | D6166 | 100ml |
| GARD08 | Gardner Colour 8 | 8 | D6166 | 500ml |
| GARD081 | Gardner Colour 8 | 8 | D6166 | 100ml |
| GARD10 | Gardner Colour 10 | 10 | D6166 | 500ml |
| GARD101 | Gardner Colour 10 | 10 | D6166 | 100ml |
| GARD12 | Gardner Colour 12 | 12 | D6166 | 500ml |
| GARD121 | Gardner Colour 12 | 12 | D6166 | 100ml |
| GARD14 | Gardner Colour 14 | 14 | D6166 | 500ml |
| GARD141 | Gardner Colour 14 | 14 | D6166 | 100ml |
| GARD16 | Gardner Colour 16 | 16 | D6166 | 500ml |
| GARD161 | Gardner Colour 16 | 16 | D6166 | 100ml |

** Standards with intermediate Gardner values are available on request


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## Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 2000 Pysical and Aggregate Properties 2130 Turbidity
## Turbidity Standards

| Description | Product No. Ratio 100ml | Product No. Ratio 500ml | Product No. Non Ratio 100ml | Product No. Non Ratio 500ml |
|---|---|---|---|---|
| Turbidity Std 0.0 NTU | CRSR-0-100 | CRSR-0-500 | CRS-0.0-100 | CRS-0.0-500 |
| Turbidity Std 0.1 NTU | CRSR-0.1-100 | CRSR-0.1-500 | CRS-0.1-100 | CRS-0.1-500 |
| Turbidity Std 0.2 NTU | CRSR-0.2-100 | CRSR-0.2-500 | CRS-0.2-100 | CRS-0.2-500 |
| Turbidity Std 0.4 NTU | CRSR-0.4-100 | CRSR-0.4-500 | CRS-0.4-100 | CRS-0.4-500 |
| Turbidity Std 0.5 NTU | CRSR-0.5-100 | CRSR-0.5-500 | CRS-0.5-100 | CRS-0.5-500 |
| Turbidity Std 1 NTU | CRSR-1-100 | CRSR-1-500 | CRS-1-100 | CRS-1-500 |
| Turbidity Std 2 NTU | CRSR-2-100 | CRSR-2-500 | CRS-2-100 | CRS-2-500 |
| Turbidity Std 4 NTU | CRSR-4-100 | CRSR-4-500 | CRS-4-100 | CRS-4-500 |
| Turbidity Std 5 NTU | CRSR-5-100 | CRSR-5-100 | CRS-5-100 | CRS-5-500 |
| Turbidity Std 10 NTU | CRSR-10-100 | CRSR-10-500 | CRS-10-100 | CRS-10-500 |
| Turbidity Std 20 NTU | CRSR-20-100 | CRSR-20-500 | CRS-20-100 | CRS-20-500 |
| Turbidity Std 40 NTU | CRSR-40-100 | CRSR-40-500 | CRS-40-100 | CRS-40-500 |
| Turbidity Std 50 NTU | CRSR-50-100 | CRSR-50-100 | CRS-50-100 | CRS-50-500 |
| Turbidity Std 60 NTU | CRSR-60-100 | CRSR-60-500 | CRS-60-100 | CRS-60-500 |
| Turbidity Std 90 NTU | CRSR-90-100 | CRSR-90-500 | CRS-90-100 | CRS-90-500 |
| Turbidity Std 100 NTU | CRSR-100-100 | CRSR-100-500 | CRS-100-100 | CRS-100-500 |
| Turbidity Std 200 NTU | CRSR-200-100 | CRSR-200-500 | CRS-200-100 | CRS-200-500 |
| Turbidity Std 400 NTU | CRSR-400-100 | CRSR-400-500 | CRS-400-100 | CRS-400-500 |
| Turbidity Std 500 NTU | CRSR-500-100 | CRSR-500-500 | CRS-500-100 | CRS-500-500 |
| Turbidity Std 800 NTU | CRSR-800-100 | CRSR-800-500 | CRS-800-100 | CRS-800-500 |
| Turbidity Std 1000NTU | CRSR-1000-100 | CRSR-1000-500 | CRS-1000-100 | CRS-1000-500 |
| Turbidity Std 4000 NTU | CRSR-4000-100 | CRSR-4000-500 | CRS-4000-100 | CRS-4000-500 |

## Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 2000 Physical and Aggregate Properties 2350 Oxidation-Reduction Potential
## Redox Standards

All values quoted are potentials of Platinum Electrode v Ag/AgCl reference (3M KCl)

| Value | Product No. 500ml | Product No. 10L | Product No. 10L Bag-In-Box |
|---|---|---|---|
| 124mV @ 25° C | RS124 | RS12410 | RSB12410 |
| 200mV @ 25° C | RS200 | RS20010 | RSB20010 |
| 220mV @ 25° C | RS220 | RS22010 | RSB22010 |
| 250mV @ 25° C | RS250 | RS25010 | RSB25010 |
| 300mV @ 25° C | RS300 | RS30010 | RSB30010 |
| 358mV @ 25° C | RS358 | RS35810 | RSB35810 |
| 400mV @ 25° C | RS400 | RS40010 | RSB40010 |
| 465mV @ 25° C | RS465 | RS46510 | RSB46510 |
| 600mV @ 25° C | RS600 | RS60010 | RSB60010 |
| 650mV @ 25° C | RS650 | RS65010 | RSB65010 |


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# Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 2000, Physical and Aggregate Properties 2510 Conductivity
## Conductivity Standards

| Product No. | Description | Pack Size |
|---|---|---|
| CSKC25 | 25µS/cm @ 25°C | 500ml |
| CSKC50 | 50µS/cm @ 25°C | 500ml |
| CSKC84 | 84µS/cm @ 25°C | 500ml |
| CSKC100 | 100µS/cm @ 25°C | 500ml |
| CSKCS | 147µS/cm @ 25°C | 500ml |
| CSKC150 | 150µS/cm @ 25°C | 500ml |
| CSKC185 | 185µS/cm @ 25°C | 500ml |
| CSKC200 | 200µS/cm @ 25°C | 500ml |
| CSKC250 | 250µS/cm @ 25°C | 500ml |
| CSKC300 | 300µS/cm @ 25°C | 500ml |
| CSKC400 | 400µS/cm @ 25°C | 500ml |
| CSKC500 | 500µS/cm @ 25°C | 500ml |
| CSKC718 | 718µS/cm @ 25°C | 500ml |
| CSKC1000 | 1000µS/cm @ 25°C | 500ml |
| CSKCL | 1413µS/cm @ 25°C | 500ml |
| CSKC2M | 2000µS/cm @ 25°C | 500ml |
| CSKC2500 | 2500µS/cm @ 25°C | 500ml |
| CSKC3M | 3000µS/cm @ 25°C | 500ml |
| CSKC5M | 5,000µS/cm @ 25°C | 500ml |
| CSKC7M | 7,000µS/cm @ 25°C | 500ml |
| CSKC10M | 10,000µS/cm @ 25°C | 500ml |
| CSKC12880 | 12,880µS/cm @ 25°C | 500ml |
| CSKC20M | 20,000µS/cm @ 25°C | 500ml |
| CSKC30M | 30,000µS/cm @ 25°C | 500ml |
| CSKC40M | 40,000µS/cm @ 25°C | 500ml |
| CSKC50M | 50,000µS/cm @ 25°C | 500ml |
| CSKC60M | 60,000µS/cm @ 25°C | 500ml |
| CSKC80M | 80,000µS/cm @ 25°C | 500ml |
| CSKC100M | 100,000µS/cm @ 25°C | 500ml |
| CSKC111800 | 111,800µS/cm @ 25°C | 500ml |
| CSKC150M | 150,000µS/cm @ 25°C | 500ml |
| CSKC200M | 200,000µS/cm @ 25°C | 500ml |
| CSKC300M | 300,000µS/cm @ 25°C | 500ml |
| CSKC350M | 350,000µS/cm @ 25°C | 500ml |
| CSKC400M | 400,000µS/cm @ 25°C | 500ml |
| CSKC450M | 450,000µS/cm @ 25°C | 500ml |
| CSKC500M | 500,000µS/cm @ 25°C | 500ml |


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# Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 3000, Metals
# Part 3113 Metals by Electrothermal Atomic Absorption Spectroscopy

| Description | Concentration 1,000ppm | Concentration 10,000ppm |
|---|---|---|
| Aluminium in 0.5M Nitric Acid | AAALH | |
| Aluminium in 1M Nitric Acid | | AAALM |
| Antimony in Water | AASBH | AASBM |
| Arsenic (III) in 1M Hydrochloric Acid | AAASH | AAASM |
| Arsenic (V) in 1M Nitric Acid | AAAS05H | |
| Barium in 0.5M Nitric Acid | AABAH | |
| Barium in 1M Nitric Acid | | AABAM |
| Beryllium in 1M Hydrochloric Acid | AABEH | AABEM |
| Bismuth in 0.5M Nitric Acid | AABIH | |
| Bismuth in 1M Nitric Acid | | AABIM |
| Boron in Water | AAB-H | AAB-M |
| Cadmium in 0.5M Nitric Acid | AACDH | |
| Cadmium in 1M Nitric Acid | | AACDM |
| Calcium in 0.5M Nitric Acid | AACAH | |
| Calcium in 1M Nitric Acid | | AACAM |
| Cesium in 1M Nitric Acid | AACSH | AACSM |
| Chromium in 0.5M Nitric Acid | AACRH | |
| Chromium in 1M Nitric Acid | | AACRM |
| Cobalt in 0.5M Nitric Acid | AACOH | |
| Cobalt in 1M Nitric Acid | | AACOM |
| Copper in 0.5M Nitric Acid | AACUH | |
| Copper in 1M Nitric Acid | | AACUM |
| Gadolinium in 1M Hydrochloric Acid | AAGDH | AAGDM |
| Gallium in 1M Hydrochloric Acid | AAGAH | AAGAM |
| Gold in 2M Hydrochloric Acid | AAAUH | AAAUM |
| Indium in 1M Nitric Acid | AAINH | AAINM |
| Iridium in 10% Hydrochloric Acid | AAIRH | AAIRM |
| Iron in 0.5M Nitric Acid | AAFEH | |
| Iron in 1M Nitric Acid | | AAFEM |
| Lanthanum in 1M Nitric Acid | AALAH | AALAM |
| Lead in 0.5M Nitric Acid | AAPBH | |
| Lead in 1M Nitric Acid | | AAPBM |
| Lithium in 0.5M Nitric Acid | AALIH | |
| Lithium in 1M Nitric Acid | | AALIM |
| Magnesium in 0.5M Nitric Acid | AAMGH | |
| Magnesium in 1M Nitric Acid | | AAMGM |
| Manganese in 1M HCl | AAMNH | AAMNM |
| Mercury in 0.5M Nitric Acid | AAHGH | |
| Mercury in 1M Nitric Acid | | AAHGM |
| Molybdenum in Water | AAMOH | AAMOM |
| Nickel in 0.5M Nitric Acid | AANIH | |


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| Description | Concentration 1,000ppm | Concentration 10,000ppm |
|---|---|---|
| Nickel in 1M Nitric Acid | | AANIM |
| Palladium in 1M Hydrochloric Acid | AAPDH | AAPDM |
| Phosphorus in Water | AAP-H | AAP-M |
| Platinum in 1M Hydrochloric Acid | AAPTH | AAPTM |
| Potassium in 0.5M Nitric Acid | AAK-H | |
| Potassium in 1M Nitric Acid | | AAK-M |
| Rhodium in 1M Nitric Acid | AARHH | AARHM |
| Selenium in 0.5M Nitric Acid | AASEH | |
| Selenium in 1M Nitric Acid | | AASEM |
| Silicon in Water | AASIH | AASIM |
| Silver in 0.5M Nitric Acid | AAAGH | |
| Silver in 1M Nitric Acid | | AAAGM |
| Sodium in 0.5M Nitric Acid | AANAH | |
| Sodium in 1M Nitric Acid | | AANAM |
| Strontium in 0.5M Nitric Acid | AASRH | |
| Strontium in 1M Nitric Acid | | AASRM |
| Sulphur in Water | AAS-H | AAS-M |


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# ICP-MS Standards

| Product No. | Starting Material and its Purity % | Matrix | Conc µg/ml | Pack size |
|---|---|---|---|---|
| **Aluminium** | | | | |
| PAL1A2 | AL 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PAL2A2 | AL 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PAL2C2 | AL 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PAL4A2 | AL 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PAL2A3 | AL 99.999 | 5% HCl (v/v) | 1,000 | 100ml |
| PAL2C3 | AL 99.999 | 5% HCl (v/v) | 1,000 | 500ml |
| PAL4A3 | AL 99.999 | 5% HCl (v/v) | 10,000 | 100ml |
| **Antimony** | | | | |
| PSB1A4 | Sb 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PSB2A4 | Sb 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PSB2C4 | Sb 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PSB4A4 | Sb 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PSB2A5 | Sb 99.999 | 10% HCl (v/v) | 1,000 | 100ml |
| PSB2C5 | Sb 99.999 | 10% HCl (v/v) | 1,000 | 500ml |
| PSB4A5 | Sb 99.999 | 10% HCl (v/v) | 10,000 | 100ml |
| **Arsenic** | | | | |
| PAS1A2 | As 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PAS2A2 | As 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PAS2C2 | As 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PAS4A2 | As 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Barium** | | | | |
| PBA1A2 | $BaCO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PBA2A2 | $BaCO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PBA2C2 | $BaCO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PBA4A2 | $BaCO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PBA2A3 | $BaCO_3$ 99.999 | 2% HCl (v/v) | 1,000 | 100ml |
| PBA2C3 | $BaCO_3$ 99.999 | 2% HCl (v/v) | 1,000 | 500ml |
| PBA4A3 | $BaCO_3$ 99.999 | 2% HCl (v/v) | 10,000 | 100ml |
| **Beryllium** | | | | |
| PBE1A2 | BeO 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PBE2A2 | BeO 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PBE2C2 | BeO 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PBE4A2 | BeO 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Bismuth** | | | | |
| PBI1A6 | Bi 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PBI2A6 | Bi 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PBI2C6 | Bi 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PBI4A6 | Bi 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |


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| Product No. | Starting Material and its Purity % | Matrix | Conc µg/ml | Pack size |
|---|---|---|---|---|
| **Boron** | | | | |
| PB1A7 | $H_3BO_3$ 99.99 | $H_2O$ | 100 | 100ml |
| PB2A7 | $H_3BO_3$ 99.99 | $H_2O$ | 1,000 | 100ml |
| PB2C7 | $H_3BO_3$ 99.99 | $H_2O$ | 1,000 | 500ml |
| PB4A7 | $H_3BO_3$ 99.99 | $H_2O$ | 10,000 | 100ml |
| **Cadmium** | | | | |
| PCD1A2 | Cd 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PCD2A2 | Cd 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PCD2C2 | Cd 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PCD4A2 | Cd 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PCD2A3 | Cd 99.999 | 2% HCl (v/v) | 1,000 | 100ml |
| PCD2C3 | Cd 99.999 | 2% HCl (v/v) | 1,000 | 500ml |
| **Calcium** | | | | |
| PCA1A2 | $CaCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PCA2A2 | $CaCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PCA2C2 | $CaCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PCA4A2 | $CaCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PCA2A3 | $CaCO_3$ 99.995 | 2% HCl (v/v) | 1,000 | 100ml |
| PCA2C3 | $CaCO_3$ 99.995 | 2% HCl (v/v) | 1,000 | 500ml |
| PCA4A3 | $CaCO_3$ 99.995 | 2% HCl (v/v) | 10,000 | 100ml |
| **Cerium** | | | | |
| PCE1A2 | $CeO_2$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PCE2A2 | $CeO_2$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PCE2C2 | $CeO_2$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PCE4A2 | $CeO_2$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Cesium** | | | | |
| PCS1A2 | CsCl 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PCS2A2 | CsCl 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PCS2C2 | CsCl 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PCS4A2 | CsCl 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Chromium** | | | | |
| PCR1A2 | $Cr(NO_3)_3.9H_2O$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PCR2A2 | $Cr(NO_3)_3.9H_2O$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PCR2C2 | $Cr(NO_3)_3.9H_2O$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PCR4A2 | $Cr(NO_3)_3.9H_2O$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PCR2A3 | Cr 99.995 | 2% HCl (v/v) | 1,000 | 100ml |
| PCR2C3 | Cr 99.995 | 2% HCl (v/v) | 1,000 | 500ml |
| PCR4A3 | Cr 99.995 | 2% HCl (v/v) | 10,000 | 100ml |
| PCR2A7 | Cr 99.995 | 2% HCl (v/v) | 1,000 | 100ml |
| **Cobalt** | | | | |
| PCO1A2 | Co 99.995 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PCO2A2 | Co 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PCO2C2 | Co 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PCO4A2 | Co 99.995 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PCO4A3 | Co 99.995 | 2% HCl (v/v) | 10,000 | 100ml |
| PCO4C3 | Co 99.995 | 2% HCl (v/v) | 10,000 | 500ml |


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|---|---|---|---|---|
| **Copper** | | | | |
| PCU1A2 | Cu 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PCU2A2 | Cu 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PCU2C2 | Cu 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PCU4A2 | Cu 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PCU2A3 | Cu 99.999 | 2% HCl (v/v) | 1,000 | 100ml |
| PCU2C3 | Cu 99.999 | 2% HCl (v/v) | 1,000 | 500ml |
| PCU4A3 | Cu 99.999 | 2% HCl (v/v) | 10,000 | 100ml |
| **Dysprosium** | | | | |
| PDY1A2 | $DY_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PDY2A2 | $DY_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PDY2C2 | $DY_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PDY4A2 | $DY_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Eribium** | | | | |
| PER1A2 | $Er_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PER2A2 | $Er_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PER2C2 | $Er_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PER4A2 | $Er_2O_3$ 99.99+ | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Europium** | | | | |
| PEU1A2 | $Eu_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PEU2A2 | $Eu_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PEU2C2 | $Eu_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PEU4A2 | $Eu_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Gadolinium** | | | | |
| PGD1A2 | $Gd_2O_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PGD2A2 | $Gd_2O_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PGD2C2 | $Gd_2O_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PGD4A2 | $Gd_2O_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Gallium** | | | | |
| PGA1A2 | Ga 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PGA2A2 | Ga 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PGA2C2 | Ga 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PGA4A2 | Ga 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Germanium** | | | | |
| PGE1A7 | Ge 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PGE2A7 | Ge 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PGE2C7 | Ge 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PGE4A7 | Ge 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Gold** | | | | |
| PAU1A8 | Au 99.998 | 5% HCl (v/v) | 100 | 100ml |
| PAU2A8 | Au 99.998 | 5% HCl (v/v) | 1,000 | 100ml |
| PAU2C8 | Au 99.998 | 5% HCl (v/v) | 1,000 | 500ml |
| PAU4A8 | Au 99.998 | 5% HCl (v/v) | 10,000 | 100ml |
| **Hafnium** | | | | |
| PHF1A3 | Hf 99.9 | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PHF2A3 | Hf 99.9 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PHF2C3 | Hf 99.9 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PHF4A3 | Hf 99.9 | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |


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|---|---|---|---|---|
| **Holmium** | | | | |
| PHO1A3 | $Ho_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PHO2A2 | $Ho_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PHO2C2 | $Ho_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PHO4A2 | $Ho_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Indium** | | | | |
| PIN1A2 | In 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PIN2A2 | In 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PIN2C2 | In 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PIN4A2 | In 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Iridium** | | | | |
| PIR1A8 | $(NH_4)_2IrCl_6$ 99.998 | 5% HCl (v/v) | 100 | 100ml |
| PIR2A8 | $(NH_4)_2IrCl_6$ 99.998 | 5% HCl (v/v) | 1,000 | 100ml |
| PIR2C8 | $(NH_4)_2IrCl_6$ 99.998 | 5% HCl (v/v) | 1,000 | 500ml |
| PIR4A8 | $(NH_4)_2IrCl_6$ 99.998 | 5% HCl (v/v) | 10,000 | 100ml |
| **Iron** | | | | |
| PFE1A2 | Fe 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PFE2A2 | Fe 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PFE2C2 | Fe 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PFE4A2 | Fe 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PFE2A3 | Fe 99.999 | 2 - 5% HCl (v/v) | 1,000 | 100ml |
| PFE2C3 | Fe 99.999 | 2 - 5% HCl (v/v) | 1,000 | 500ml |
| PFE4A3 | Fe 99.999 | 2 - 5% HCl (v/v) | 10,000 | 100ml |
| **Lanthanum** | | | | |
| PLA1A2 | $LA_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PLA2A2 | $LA_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PLA2C2 | $LA_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PLA4A2 | $LA_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Lead** | | | | |
| PPB1A2 | Pb 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PPB2A2 | Pb 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PPB2C2 | Pb 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PPB4A2 | Pb 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Lithium** | | | | |
| PLI1A2 | $Li_2CO_3$ 99.997 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PLI2A2 | $Li_2CO_3$ 99.997 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PLI2C2 | $Li_2CO_3$ 99.997 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PLI4A2 | $Li_2CO_3$ 99.997 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PLI2A3 | $Li_2CO_3$ 99.997 | 2 - 5% HCl (v/v) | 1,000 | 100ml |
| PLI2C3 | $Li_2CO_3$ 99.997 | 2 - 5% HCl (v/v) | 1,000 | 500ml |
| PLI4A3 | $Li_2CO_3$ 99.997 | 2 - 5% HCl (v/v) | 10,000 | 100ml |
| **Lutetium** | | | | |
| PLU1A2 | $Lu_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PLU2A2 | $Lu_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PLU2C2 | $Lu_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PLU4A2 | $Lu_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |


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|---|---|---|---|---|
| **Magnesium** | | | | |
| PMG1A2 | Mg 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PMG2A2 | Mg 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PMG2C2 | Mg 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PMG4A2 | Mg 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PMG2A3 | Mg 99.99 | 2 - 5% HCl (v/v) | 1,000 | 100ml |
| PMG2C3 | Mg 99.99 | 2 - 5% HCl (v/v) | 1,000 | 500ml |
| PMG4A3 | Mg 99.99 | 2 - 5% HCl (v/v) | 10,000 | 100ml |
| **Manganese** | | | | |
| PMN1A2 | Mn 99.98 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PMN2A2 | Mn 99.98 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PMN2C2 | Mn 99.98 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PMN4A2 | Mn 99.98 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Mercury** | | | | |
| PHG1A6 | Hg 99.999+ | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PHG2A6 | Hg 99.999+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PHG2C6 | Hg 99.999+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PHG4A6 | Hg 99.999+ | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Molybdenum** | | | | |
| PMO1A7 | Mo 99.999 | 2% $NH_4OH$ (v/v) | 100 | 100ml |
| PMO2A7 | Mo 99.999 | 2% $NH_4OH$ (v/v) | 1,000 | 100ml |
| PMO2C7 | Mo 99.999 | 2% $NH_4OH$ (v/v) | 1,000 | 500ml |
| PMO4A7 | Mo 99.999 | 2% $NH_4OH$ (v/v) | 10,000 | 100ml |
| **Neodymium** | | | | |
| PND1A2 | $Nd_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PND2A2 | $Nd_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PND2C2 | $Nd_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PND4A2 | $Nd_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Nickel** | | | | |
| PNI1A2 | Ni 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PNI2A2 | Ni 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PNI2C2 | Ni 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PNI4A2 | Ni 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Niobium** | | | | |
| PNB1A9 | Nb 99.9+ | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PNB2A9 | Nb 99.9+ | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PNB2C9 | Nb 99.9+ | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PNB4A9 | Nb 99.9+ | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Palladium** | | | | |
| PPD1A8 | Pd 99.999 | 5% HCl (v/v) | 100 | 100ml |
| PPD2A8 | Pd 99.999 | 5% HCl (v/v) | 1,000 | 100ml |
| PPD2C8 | Pd 99.999 | 5% HCl (v/v) | 1,000 | 500ml |
| PPB4A8 | Pd 99.999 | 5% HCl (v/v) | 10,000 | 100ml |
| **Phosphorus** | | | | |
| PP1A7 | $NH_4H_2PO_4$ 99.999 | 0.05% $H_2SO_4$ (v/v) | 100 | 100ml |
| PP2A7 | $NH_4H_2PO_4$ 99.999 | 0.05% $H_2SO_4$ (v/v) | 1,000 | 100ml |
| PP2C7 | $NH_4H_2PO_4$ 99.999 | 0.05% $H_2SO_4$ (v/v) | 1,000 | 500ml |
| PP4A7 | $NH_4H_2PO_4$ 99.999 | 0.05% $H_2SO_4$ (v/v) | 10,000 | 100ml |
| PPT1A8 | Pt 99.995 | 5% HCl (v/v) | 100 | 100ml |
| PPT2A8 | Pt 99.995 | 5% HCl (v/v) | 1,000 | 100ml |
| PPT2C8 | Pt 99.995 | 5% HCl (v/v) | 1,000 | 500ml |
| PPT4A8 | Pt 99.995 | 5% HCl (v/v) | 10,000 | 100ml |


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|---|---|---|---|---|
| **Potassium** | | | | |
| PK1A2 | $KNO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PK2A2 | $KNO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PK2C2 | $KNO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PK4A2 | $KNO_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PK2A3 | KCl 99.999 | $H_2O$ | 1,000 | 100ml |
| PK2C3 | KCl 99.999 | $H_2O$ | 1,000 | 500ml |
| PK4A3 | KCl 99.999 | $H_2O$ | 10,000 | 100ml |
| **Praseodymium** | | | | |
| PPR1A2 | $Pr_6O_{11}$ 99.999 | 5% HCl (v/v) | 100 | 100ml |
| PPR2A2 | $Pr_6O_{11}$ 99.999 | 5% HCl (v/v) | 1,000 | 100ml |
| PPR2C2 | $Pr_6O_{11}$ 99.999 | 5% HCl (v/v) | 1,000 | 500ml |
| PPR4A2 | $Pr_6O_{11}$ 99.999 | 5% HCl (v/v) | 10,000 | 100ml |
| **Rhenium** | | | | |
| PRE1A7 | $NH_4ReO_4$ 99.999 | $H_2O$ | 100 | 100ml |
| PRE2A7 | $NH_4ReO_4$ 99.999 | $H_2O$ | 1,000 | 100ml |
| PRE2C7 | $NH_4ReO_4$ 99.999 | $H_2O$ | 1,000 | 500ml |
| PRE4A7 | $NH_4ReO_4$ 99.999 | $H_2O$ | 10,000 | 100ml |
| **Rhodium** | | | | |
| PRH1A8 | $(NH_4)_3RHCl_6$ 99.99 | 5% HCl (v/v) | 100 | 100ml |
| PRH2A8 | $(NH_4)_3RHCl_6$ 99.99 | 5% HCl (v/v) | 1,000 | 100ml |
| PRH2C8 | $(NH_4)_3RHCl_6$ 99.99 | 5% HCl (v/v) | 1,000 | 500ml |
| PRH4A8 | $(NH_4)_3RHCl_6$ 99.99 | 5% HCl (v/v) | 10,000 | 100ml |
| **Rubidium** | | | | |
| PRB1A2 | $RbNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PRB2A2 | $RbNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PRB2C2 | $RbNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PRB4A2 | $RbNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Ruthenium** | | | | |
| PRU1A8 | $(NH_4)_3RuCl_6$ 99.99 | 5% HCl (v/v) | 100 | 100ml |
| PRU2A8 | $(NH_4)_3RuCl_6$ 99.99 | 5% HCl (v/v) | 1,000 | 100ml |
| PRU2C8 | $(NH_4)_3RuCl_6$ 99.99 | 5% HCl (v/v) | 1,000 | 500ml |
| PRU4A8 | $(NH_4)_3RuCl_6$ 99.99 | 5% HCl (v/v) | 10,000 | 100ml |
| **Samarium** | | | | |
| PSM1A2 | $Sm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PSM2A2 | $Sm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PSM2C2 | $Sm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PSM4A2 | $Sm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Scandium** | | | | |
| PSC1A2 | $Sc2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PSC2A2 | $Sc2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PSC2C2 | $Sc2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PSC4A2 | $Sc2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Selenium** | | | | |
| PSE1A2 | Se 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PSE2A2 | Se 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PSE2C2 | Se 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PSE4A2 | Se 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |


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| Product No. | Starting Material and its Purity % | Matrix | Conc µg/ml | Pack size |
|---|---|---|---|---|
| **Silicon** | | | | |
| PSI1A9 | $(NH_4)_2SiF_6$ 99.99 | 0.05% HF (v/v) | 100 | 100ml |
| PSI2A9 | $(NH_4)_2SiF_6$ 99.99 | 0.05% HF (v/v) | 1,000 | 100ml |
| PSI2C9 | $(NH_4)_2SiF_6$ 99.99 | 0.05% HF (v/v) | 1,000 | 500ml |
| PSI4A9 | $(NH_4)_2SiF_6$ 99.99 | 0.05% HF (v/v) | 10,000 | 100ml |
| PSI2A7 | $Na_2SiO_3$ 99.9 | $H_2O$ | 1,000 | 100ml |
| PSI2C7 | $Na_2SiO_3$ 99.9 | $H_2O$ | 1,000 | 500ml |
| PSI4A7 | $Na_2SiO_3$ 99.9 | $H_2O$ | 10,000 | 100ml |
| **Silver** | | | | |
| PAG1A2 | Ag 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PAG2A2 | Ag 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PAG2C2 | Ag 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PAG4A2 | Ag 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Sodium** | | | | |
| PNA1A2 | $NaNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PNA2A2 | $NaNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PNA2C2 | $NaNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PNA4A2 | $NaNO_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PNA2A3 | NaCl 99.999 | $H_2O$ | 1,000 | 100ml |
| PNA2C3 | NaCl 99.999 | $H_2O$ | 1,000 | 500ml |
| PNA4A3 | NaCl 99.999 | $H_2O$ | 10,000 | 100ml |
| **Strontium** | | | | |
| PSR1A2 | $SrCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PSR2A2 | $SrCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PSR2C2 | $SrCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PSR4A2 | $SrCO_3$ 99.995 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PSR2A3 | $SrCO_3$ 99.995 | 2 - 5% HCl (v/v) | 1,000 | 100ml |
| PSR2C3 | $SrCO_3$ 99.995 | 2 - 5% HCl (v/v) | 1,000 | 500ml |
| PSR4A3 | $SrCO_3$ 99.995 | 2 - 5% HCl (v/v) | 10,000 | 100ml |
| **Sulphur** | | | | |
| PS1A7 | $(NH_4)2SO_4$ 99.999 | H2O | 100 | 100ml |
| PS2A7 | $(NH_4)2SO_4$ 99.999 | H2O | 1,000 | 100ml |
| PS2C7 | $(NH_4)2SO_4$ 99.999 | H2O | 1,000 | 500ml |
| PS4A7 | $(NH_4)_2SO_4$ 99.999 | $H_2O$ | 10,000 | 100ml |
| **Tantalum** | | | | |
| PTA1A9 | Ta 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PTA2A9 | Ta 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PTA2C9 | Ta 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PTA4A9 | Ta 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Tellurium** | | | | |
| PTE1A10 | Te 99.999 | 20% HCl (v/v) | 100 | 100ml |
| PTE2A10 | Te 99.999 | 20% HCl (v/v) | 1,000 | 100ml |
| PTE2C10 | Te 99.999 | 20% HCl (v/v) | 1,000 | 500ml |
| **Terbium** | | | | |
| PTB1A2 | $Tb_4O_7$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PTB2A2 | $Tb_4O_7$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PTB2C2 | $Tb_4O_7$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PTB4A2 | $Tb_4O_7$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |


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| Product No. | Starting Material and its Purity % | Matrix | Conc µg/ml | Pack size |
|---|---|---|---|---|
| **Thallium** | | | | |
| PTL1A2 | $TlNO_3$ 99.9995 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PTL2A2 | $TlNO_3$ 99.9995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PTL2C2 | $TlNO_3$ 99.9995 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PTL4A2 | $TlNO_3$ 99.9995 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Thorium** | | | | |
| PTH1A2 | $ThO_2$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PTH2A2 | $ThO_2$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PTH2C2 | $ThO_2$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PTH4A2 | $ThO_2$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Thulium** | | | | |
| PTM1A2 | $Tm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PTM2A2 | $Tm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PTM2C2 | $Tm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PTM4A2 | $Tm_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Tin** | | | | |
| PSN1A5 | Sn 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PSN2A5 | Sn 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PSN2C5 | Sn 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PSN4A5 | Sn 99.999 | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PSN2A13 | Sn 99.999 | 10% HCl (v/v) | 1,000 | 100ml |
| PSN2C13 | Sn 99.999 | 10% HCl (v/v) | 1,000 | 500ml |
| PSN4A19 | Sn 99.999 | 20% HCl (v/v) | 10,000 | 100ml |
| **Titanium** | | | | |
| PTI1A9 | Ti 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PTI2A9 | Ti 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PTI2C9 | Ti 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PTI4A9 | Ti 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Tungsten** | | | | |
| PW2A7 | W 99.99+ | 2% $NH_4OH$ (v/v) | 1,000 | 100ml |
| PW2C7 | W 99.99+ | 2% $NH_4OH$ (v/v) | 1,000 | 500ml |
| PW4A7 | W 99.99+ | 2% $NH_4OH$ (v/v) | 10,000 | 100ml |
| **Uranium** | | | | |
| PU1A2 | $U_3O_8$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PU2A2 | $U_3O_8$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PU2C2 | $U_3O_8$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PU4A2 | $U_3O_8$ 99.95 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Vanadium** | | | | |
| PV1A19 | $NH_4VO_3$ 99.95+ | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PV2A19 | $NH_4VO_3$ 99.95+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PV2C19 | $NH_4VO_3$ 99.95+ | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PV4A19 | $NH_4VO_3$ 99.95+ | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Ytterbium** | | | | |
| PYB2A2 | $Yb_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PYB2C2 | $Yb_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PYB4A2 | $Yb_2O_3$ 99.99 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| **Yttrium** | | | | |
| PY1A2 | $Y_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PY2A2 | $Y_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PY2C2 | $Y_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PY4A2 | $Y_2O_3$ 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |


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| Product No. | Starting Material and its Purity % | Matrix | Conc µg/ml | Pack size |
|---|---|---|---|---|
| **Zinc** | | | | |
| PZN1A2 | Zn 99.999 | 2 - 5% $HNO_3$ (v/v) | 100 | 100ml |
| PZN2A2 | Zn 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PZN2C2 | Zn 99.999 | 2 - 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PZN4A2 | Zn 99.999 | 2 - 5% $HNO_3$ (v/v) | 10,000 | 100ml |
| PZN2A3 | Zn 99.999 | 2% HCl (v/v) | 1,000 | 100ml |
| PZN2C3 | Zn 99.999 | 2% HCl (v/v) | 1,000 | 500ml |
| PZN4A3 | Zn 99.999 | 2% HCl (v/v) | 10,000 | 100ml |
| **Zirconium** | | | | |
| PZR1A2 | Zr 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 100 | 100ml |
| PZR2A2 | Zr 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 100ml |
| PZR2C2 | Zr 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 1,000 | 500ml |
| PZR4A2 | Zr 99.98 | 1% HF + 5% $HNO_3$ (v/v) | 10,000 | 100ml |


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# Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 3000, Metals
# Part 3500 Metals by Flame Photometry

## Single Element Flame Photometry Standards

| Product No. | Description | Concentration | Pack size |
|---|---|---|---|
| FIBA1 | Barium | 1,000ppm | 500ml |
| FIBA3 | Barium | 3,000ppm | 500ml |
| FICA1 | Calcium | 1,000ppm | 500ml |
| FICA2 | Calcium | 2,000ppm | 500ml |
| FICS1 | Cesium | 1,000ppm | 500ml |
| FILI1 | Lithium | 1,000ppm | 500ml |
| FINA1 | Sodium | 1,000ppm | 500ml |
| FIK1 | Potassium | 1,000ppm | 500ml |
| FISR1 | Strontium | 1,000ppm | 500ml |
| FIRB1 | Rubidium | 1,000ppm | 500ml |

## Multi-Element Linearity Standards

| Product Number | Description | Concentration | Pack Size |
|---|---|---|---|
| FPLE5 | | Low | 500ml |
| | Barium | 28.8ppm | |
| | Calcium | 18.2ppm | |
| | Lithium | 1.91ppm | |
| | Potassium | 2.09ppm | |
| | Sodium | 2.15ppm | |
| FPME5 | | Medium | 500ml |
| | Barium | 105ppm | |
| | Calcium | 52.4ppm | |
| | Lithium | 5.42ppm | |
| | Potassium | 5.37ppm | |
| | Sodium | 5.67ppm | |
| FPHE5 | | High | 500ml |
| | Barium | 510ppm | |
| | Calcium | 112ppm | |
| | Lithium | 10.0ppm | |
| | Potassium | 11.4ppm | |
| | Sodium | 11.3ppm | |
| FPHK3 | Combination of FPLE5, FPME5 & FPHE5 | As above | 3 x 500ml |


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# Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 4000, Inorganic Nonmetallic Constituents Part 4110 Determination of Anions by Ion Chromatography Anion Standards

| Product No. | Ion | Starting Material | Matrix | Concentration | Pack size |
|---|---|---|---|---|---|
| **Acetate** | | | | | |
| ICAU35 | $CH_3COO^-$ | Sodium Acetate | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS35 | $CH_3COO^-$ | Sodium Acetate | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB35 | $CH_3COO^-$ | Sodium Acetate | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Bromide** | | | | | |
| ICAU01 | $Br^-$ | KBr | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS01 | $Br^-$ | KBr | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB01 | $Br^-$ | KBr | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Chloride** | | | | | |
| ICAU02 | $Cl^-$ | KCl | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS02 | $Cl^-$ | KCl | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB02 | $Cl^-$ | KCl | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Chromate** | | | | | |
| ICAU29 | $CrO_4^{2-}$ | $NH_4Cr_2O_7$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS29 | $CrO_4^{2-}$ | $NH_4Cr_2O_7$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB29 | $CrO_4^{2-}$ | $NH_4Cr_2O_7$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Cyanide** | | | | | |
| ICAU08 | $CN^-$ | NaCN | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS08 | $CN^-$ | NaCN | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB08 | $CN^-$ | NaCN | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Fluoride** | | | | | |
| ICAU03 | $F^-$ | NaF | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS03 | $F^-$ | NaF | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB03 | $F^-$ | NaF | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Formate** | | | | | |
| ICAU34 | $HCOO^-$ | Sodium Formate | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS34 | $HCOO^-$ | Sodium Formate | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB34 | $HCOO^-$ | Sodium Formate | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Iodide** | | | | | |
| ICAU40 | $I^-$ | $NH_4I$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS40 | $I^-$ | $NH_4I$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB40 | $I^-$ | $NH_4I$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |


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| Product No. | Ion | Starting Material | Matrix | Concentration | Pack size |
|---|---|---|---|---|---|
| **Nitrate** | | | | | |
| ICAU04 | $NO_3$- | $NH_4NO_3$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS04 | $NO_3$- | $NH_4NO_3$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB04 | $NO_3$- | $NH_4NO_3$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Nitrite** | | | | | |
| ICAU11 | $NO_2$- | $NaNO_2$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS11 | $NO_2$- | $NaNO_2$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB11 | $NO_2$- | $NaNO_2$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Oxalate** | | | | | |
| ICAU13 | $(COO)_2^{2-}$ | $K_2C_2O_4$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS13 | $(COO)_2^{2-}$ | $K_2C_2O_4$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB13 | $(COO)_2^{2-}$ | $K_2C_2O_4$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Phosphate** | | | | | |
| ICAU05 | $PO_4^{3-}$ | $NH_4H_2PO_4$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS05 | $PO_4^{3-}$ | $NH_4H_2PO_4$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB05 | $PO_4^{3-}$ | $NH_4H_2PO_4$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Silica** | | | | | |
| ICAU12 | $SiO_2$ | $Na_2O_3Si$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS12 | $SiO_2$ | $Na_2O_3Si$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB12 | $SiO_2$ | $Na_2O_3Si$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Sulphate** | | | | | |
| ICAU06 | $SO_4^{2-}$ | $(NH_4)_2SO_4$ | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS06 | $SO_4^{2-}$ | $(NH_4)_2SO_4$ | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB06 | $SO_4^{2-}$ | $(NH_4)_2SO_4$ | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |
| **Tartrate** | | | | | |
| ICAU36 | $(CHOH)_2(COO)_2^{2-}$ | Tartaric Acid | $H_2O$ | 0.1mg/ml (100ppm) | 100ml |
| ICAS36 | $(CHOH)_2(COO)_2^{2-}$ | Tartaric Acid | $H_2O$ | 1mg/ml (1,000ppm) | 100ml |
| ICAB36 | $(CHOH)_2(COO)_2^{2-}$ | Tartaric Acid | $H_2O$ | 1mg/ml (1,000ppm) | 500ml |


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# Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 5000, Aggregate Organic Constituents. 5220 Chemical Oxygen Demand (COD)

## Chemical Oxygen Demand (COD) Standards

| Product No. | Description | Pack Size |
|---|---|---|
| COD10 | 10 mg/l solution | 500ml |
| COD20 | 20 mg/l solution | 500ml |
| COD50 | 50 mg/l solution | 500ml |
| COD100 | 100 mg/l solution | 500ml |
| COD200 | 200 mg/l solution | 500ml |
| COD500 | 500 mg/l solution | 500ml |
| COD600 | 600 mg/l solution | 500ml |
| COD1000 | 1000 mg/l solution | 500ml |
| COD1300 | 1300 mg/l solution | 500ml |
| COD1500 | 1500 mg/l solution | 500ml |
| COD2000 | 2000 mg/l solution | 500ml |
| COD5000 | 5000 mg/l solution | 500ml |
| COD6000 | 6000 mg/l solution | 500ml |
| COD10M | 10000 mg/l solution | 500ml |
| COD20M | 20000 mg/l solution | 500ml |
| COD60M5 | 60000 mg/l solution | 500ml |

## Chemical Oxygen Demand (COD) Reagents

| Product No. | Description | Pack Size |
|---|---|---|
| WTR50W | COD Reagent (1977 method)* | 2.5L |
| WTR49W | Modified COD Reagent (1986 method) Mercury free | 2.5L |
| CODMS | 20% w/v Mercury (II) Sulphate in 10% w/v Sulphuric Acid | 500ml |
| KC2002F | 0.0208M (0.125N) Potassium Dichromate | 1L |
| AGN01001 | Silver Nitrate Solution | 100ml |
| AGS1W | 1% w/v Silver Sulphate in Sulphuric Acid | 2.5L |
| COD200 | COD Calibration Standard 200mg/l Solution | 500ml |
| COD600 | COD Calibration Standard 600mg/l Solution | 500ml |
| COD1300 | COD Calibration Standard 1300mg/l Solution | 500ml |
| PFS1 | Ferroin Indicator | 100ml |

* Methodology as per the Department of the Environment (U.K.) “Chemical Oxygen Demand (Dichromate Value) of Polluted and Waste Waters” published in 1977 and revised in 1986.


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# Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 5000, Aggregate Organic Constituents, 5310 Total Organic Carbon

## TOC Standards

| Product No. | Description | Pack Size |
|---|---|---|
| TOC5 | Total Organic Carbon Standard 5ppm | 500ml |
| TOC10 | Total Organic Carbon Standard 10ppm | 500ml |
| TOC20 | Total Organic Carbon Standard 20ppm | 500ml |
| TOC50 | Total Organic Carbon Standard 50ppm | 500ml |
| TOC100 | Total Organic Carbon Standard 100ppm | 500ml |
| TOC250 | Total Organic Carbon Standard 250ppm | 500ml |
| TOC500 | Total Organic Carbon Standard 500ppm | 500ml |
| TOC1M | Total Organic Carbon Standard 1000ppm | 500ml |
| TOC2M | Total Organic Carbon Standard 2000ppm | 500ml |


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# Standard Methods for the Examination of Water and Wastewater 21st Edition 2005, APHA AWWA WEF Part 6000, Individual Organic Compounds, 6200 Volatile Organic Compounds (VOCs)
## VOC Single Component Standards

| Product No. | Description | Concentration | US EPA Methods | Packed in Ampoule |
|---|---|---|---|---|
| REVOC101 | 1,1-Dichlorethene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC102 | Dichloromethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC103 | trans-1,2-Dichloroethene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC104 | 1,1-Dichloroethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC105 | cis-1,2-Dichloroethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC106 | 2,2-Dichloropropane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC107 | Bromochloromethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC108 | Chloroform | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC109 | 1,1,1-Trichloroethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC110 | 1,1-Dichloropropene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC111 | Carbon Tetrachloride | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC112 | 1,2-Dichloroethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC113 | Benzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC114 | Trichloroethene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC115 | 1,2-Dichloropropane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC116 | Dibromomethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC117 | Bromodichloromethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC118 | trans-1,3-Dichloropropene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC119 | Toluene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC120 | cis-1,3-Dichloropropene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC121 | 1,3-Dichloropropane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC122 | Tetrachloroethene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC123 | Dibromochloromethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC124 | Dibromoethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC125 | Chlorobenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC126 | 1,1,1,2-Tetrachloroethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B. | 1ml |


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# Volatile Organic Compounds (VOCs)
# Single Component Standards

| Product No. | Description | Concentration | US EPA Methods | Packed in Ampoule |
|---|---|---|---|---|
| REVOC127 | Ethylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC128 | m-Xylene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC129 | p-Xylene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC130 | o-Xylene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC131 | Styrene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC132 | Bromoform | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC133 | Isopropylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC134 | 1,1,2,2-Tetrachloroethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC135 | 1,2,3-Trichloropropane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC136 | Bromobenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC137 | n-Propylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC138 | 2-Chlorotoluene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC139 | 1,2,4-Trimethylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC140 | 4-Chlorotoluene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC141 | tert-Butylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC142 | 1,3,5-Trimethylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC143 | sec-Butylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC144 | 1,3-Dichlorobenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC145 | 4-Isopropyltoluene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC146 | 1,4-Dichlorobenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC147 | 1,2-Dichlorobenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC148 | n-Butylbenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC149 | 1,2-Dibromo-3-chloropropane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC150 | 1,2,3-Trichlorobenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC151 | Hexachlorobutadiene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC152 | Naphthalene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC153 | 1,2,4-Trichlorobenzene | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |
| REVOC154 | 1,1,2-Trichloroethane | 2,000µg/ml in Purge and Trap Methanol | 502.2, 524.2, 8021, 8021A, 8021B, 624, 8240B, 8260B | 1ml |


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## Native PBBs (polybromobiphenyls)

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPBB1001 | 2-Bromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1002 | 3-Bromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1003 | 4-Bromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1004 | 2,2'-Dibromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1005 | 2,4-Dibromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1006 | 2,5-Dibromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1007 | 2,6-Dibromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1008 | 4,4'-Dibromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1009 | 2,2',5-Tribromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1010 | 2,3',5-Tribromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1011 | 2,4,5-Tribromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1012 | 2,4',5-Tribromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1013 | 3,4,5-Tribromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1014 | 2,2',4,5'-Tetrabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1015 | 2,2',5,5'-Tetrabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1016 | 2,2',5,6'-Tetrabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1017 | 3,3',4,4'-Tetrabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1018 | 3,3',5,5'-Tetrabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1019 | 2,2',4,5',6-Pentabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1020 | 3,3',4,5,5'-Pentabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1021 | 2,2',4,4',5,5'-Hexabromobiphenyl | 50µg/mL in hexane | 1ml |
| REPBB1022 | 2,2',4,4',6,6'-Hexabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1023 | 3,3',4,4',5,5'-Hexabromobiphenyl | 10µg/mL in cyclohexane | 1ml |
| REPBB1024 | 2,3,3',4,4',5,5'-Heptabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1025 | 2,2',3,3',4,4',5,5'-Octabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1026 | 2,2',3,4,4',5,5',6-Octabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1027 | 2,3,3',4,4',5,5',6-Octabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1028 | Octabromobiphenyl, techn. (hepta+octa+nona) | 50µg/mL in isooctane | 1ml |
| REPBB1029 | 2,2',3,3',4,4',5,5',6-Nonabromobiphenyl | 50µg/mL in isooctane | 1ml |
| REPBB1030 | Decabromobiphenyl | 50µg/mL in isooctane | 1ml |


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# Other halogenated flame retardants

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPBB9001- | 2-Fluorodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9002- | 4-Fluorodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9003- | 2,4'-Difluorodiphenyl ether | 1000µg/mL in isooctane | 1ml |
| REPBB9004- | 3,3'-Difluorodiphenyl ether | 1000µg/mL in isooctane | 1ml |
| REPBB9005- | 3-Bromo-4'-fluorodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9006- | 3'-Fluoro-2,4-dibromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9007- | 3'-Fluoro-3,4-dibromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9008- | 4'-Fluoro-2,3',4-tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9009- | 4'-Fluoro-2,3',6-tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9010- | 2'-Fluoro-2,4,4'-tribromodiphenyl ether | 50µg/mL in toluene | 1ml |
| REPBB9011- | 2'-Fluoro-2,4,4'-tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9012- | 6-Fluoro-2,2',4,4'-tetrabromodiphenyl ether | 50µg/mL in toluene | 1ml |
| REPBB9013- | 6-Fluoro-2,2',4,4'-tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9014- | 5,5'-Difluoro-2,2',4,4'-tetrabromodiphenyl ether (2,2',4,4'-Tetrabromo-5,5'-difluorodiphenyl ether) | 50µg/mL in toluene | 1ml |
| REPBB9015- | 5,5'-Difluoro-2,2',4,4'-tetrabromodiphenyl ether (2,2',4,4'-Tetrabromo-5,5'-difluorodiphenyl ether) | 50µg/mL in isooctane | 1ml |
| REPBB9016- | 6-Fluoro-2,3',4,4'-tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9017- | 4'-Fluoro-2,3',4,6-tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9018- | 5,6-Difluoro-2,2',3,4,4'-pentabromodiphenyl ether (2,2',3,4,4'-Pentabromo-5,6-difluorodiphenyl ether) | 50µg/mL in isooctane | 1ml |
| REPBB9019- | 3,6-Difluoro-2,2',4,4',5-pentabromodiphenyl ether (2,2',4,4',5-Pentabromo-3,6-difluorodiphenyl ether) | 50µg/mL in isooctane | 1ml |
| REPBB9020- | 3-Fluoro-2,2',4,4',6-pentabromodiphenyl ether | 50µg/mL in toluene | 1ml |
| REPBB9021- | 3-Fluoro-2,2',4,4',6-pentabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9022- | 3-Fluoro-2,3',4,4',6-pentabromodiphenyl ether | 50µg/mL in Isooctane | 1ml |
| REPBB9023- | 3,5-Difluoro-2,3',4,4',6-pentabromodiphenyl ether (2,3',4,4',6-Pentabromo-3,5-difluorodiphenyl ether) | 50µg/mL in isooctane | 1ml |
| REPBB9024- | 4'-Fluoro-2,3,3',4,5,6-hexabromodiphenyl ether | 50µg/mL in toluene | 1ml |
| REPBB9025- | 3-Fluoro-2,2',4,4',5,5',6-heptabromodiphenyl ether | 50µg/mL in toluene | 1ml |
| REPBB9026- | 4',6-Difluoro-2,2',3,3',4,5,5',6'-octabromodiphenyl ether | 50µg/mL in toluene | 1ml |
| REPBB9027- | 4'-Fluoro-2,2',3,3',4,5,5',6,6'-nonabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB9028- | 4'-Fluoro-2,2',3,3',4,5,5',6,6'-nonabromodiphenyl ether | 50µg/mL in toluene | 1ml |


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## Native PBDEs

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPBB1101 | 2-Bromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1102 | 3-Bromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1103 | 4-Bromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1104 | 4-Bromodiphenyl ether | Neat | 5mg |
| REPBB1105 | 2,4-Dibromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1106 | 3,4'-Dibromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1107 | 4,4'-Dibromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1108 | 2,2',4-Tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1109 | 2,3',4-Tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1110 | 2,4,4'-Tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1111 | 3,3',4-Tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1112 | 3,3',4-Tribromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1113 | 2,2',4,4'-Tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1114 | 2,2',4,5'-Tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1115 | 2,3',4,4'-Tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1116 | 2,3',4',6-Tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1117 | 2,4,4',6-Tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1118 | 3,3',4,4'-Tetrabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1119 | 2,2',3,4,4'-Pentabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1120 | 2,2',4,4',5-Pentabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1121 | 2,2',4,4',6-Pentabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1122 | 2,3',4,4',5-Pentachlorobiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1123 | 2,3',4,4',6-Pentabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1124 | 2,2',3,4,4',5-Hexabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1125 | 2,2',4,4',5,5'-Hexabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1126 | 2,2',4,4',5,6'-Hexabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1127 | 2,2',3,4,4',5,6-Heptabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1128 | 2,2',3,4,4',5',6-Heptabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1129 | 2,3,3',4,4',5,6-Heptabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1130 | 2,2',3,3',4,4',5,6-Octabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1131 | 2,2',3,3',4,4',5,6'-Octabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1132 | 2,2',3,4,4',5,5',6'-Octabromodiphenyl ether | 50µg/mL in Isooctane | 1ml |
| REPBB1133 | 2,3,3',4,4',5,5',6-Octabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1134 | 2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1135 | 2,2',3,3',4,4',5,6,6'-Nonabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1136 | 2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1137 | Decabromodiphenyl ether | 50µg/mL in toluene | 1ml |

## Other halogenated flame retardants

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPBB1201 | 2,2-Bis[3,5-dibromo-4-(2,3-dibromopropoxy)phenyl]propane | 50µg/mL in toluene | 1ml |
| REPBB1202 | 1,2-Bis(2,4,6-tribromophenoxy)ethane | 50µg/mL in toluene | 1ml |
| REPBB1203 | Butyldiphenylphosphate | 1000µg/mL in isopropanol | 1ml |
| REPBB1204 | Decabromodiphenylethane | 50µg/mL in chlorobenzene | 1ml |
| REPBB1205 | Dechlorane plus | 50µg/mL in toluene | 1ml |
| REPBB1206 | Dibromoneopentylglycol | 50µg/mL in isopropanol | 1ml |
| REPBB1207 | Dibutylphenylphosphate | 1000µg/mL in isopropanol | 1ml |
| REPBB1208 | Ethylene bis(tetrabromophthalamide | Neat | 10mg |
| REPBB1209 | 1,2,3,4,5,6-Hexabromocyclohexane | 50µg/mL in isooctane | 1ml |
| REPBB1210 | 1,2,5,6,9,10-Hexabromocyclododecane | 1000µg/mL in toluene | 1ml |
| REPBB1211 | Pentabromoethylbenzene | 50µg/mL in isooctane | 1ml |
| REPBB1212 | 3,3',5,5'-Tetrabromobisphenol A | 50µg/mL in isooctane | 1ml |
| REPBB1213 | 2,2',6,6'-Tetrabromobisphenol A diallyl ether | 50µg/mL in toluene | 1ml |
| REPBB1214 | 3,3',5,5'-Tetrabromobisphenol A dimethyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1215 | 3,3',5,5'-Tetrabromobisphenol A bis(2,3-dibromopropyl) ether | 50µg/mL in isooctane | 1ml |
| REPBB1216 | 3,3',5,5'-Tetrabromobisphenol A bis(2-hydroxyethyl) ether | 50µg/mL in isooctane | 1ml |
| REPBB1217 | 2,4,6-Tribromophenylallyl ether | 50µg/mL in isooctane | 1ml |
| REPBB1218 | Tetrabromophthalic anhydride | 50µg/mL in isooctane | 1ml |
| REPBB1219 | Tetradecabromo-1,4-diphenoxybenzene | 50µg/mL in cyclohexane | 1ml |


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## Other halogenated flame retardants

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPBB1301 | Bis(2,3-dibromopropyl)phosphate, tech. | 50µg/mL in isooctane | 1ml |
| REPBB1302 | Bis(2,3-dibromopropyl)phosphate | 50µg/mL in isooctane | 1ml |
| REPBB1303 | Bisphenol A bis(diphenyl)phosphate | 50µg/mL in methanol | 1ml |
| REPBB1304 | 9,10-Dihydro-9-Oxa-10-Phospaphenantrene-10-Oxide | 50µg/mL in isooctane | 1ml |
| REPBB1305 | 2-Ethylhexyldiphenylphosphate | Neat | 1g |
| REPBB1306 | Isopropylated trisphenyl phosphate (Phenol, isopropylated, phosphate) | Neat | 1g |
| REPBB1307 | Phenoxyterminated carbonate oligomer of tetrabromobisphenol A | Neat | 1g |
| REPBB1308 | Polyphosphoric acids ammonium salt | Neat | 1g |
| REPBB1309 | 2,4,6-Tribromophenylterminated tetrabromobisphenol-A carbonate oligomer | Neat | 1g |
| REPBB1310 | Tetraphenylrecorcinol bis(diphenylphosphate | 50µg/mL in methanol | 1ml |
| REPBB1311 | Tris-(aziridinyl)-phosphineoxide | 100µg/mL in methanol | 1ml |
| REPBB1312 | Tris-(aziridinyl)-phosphineoxide | 500µg/mL in methanol | 1ml |
| REPBB1313 | Tris(2,3-dibromopropyl)phosphate, tech. | Neat | 100mg |
| REPBB1314 | Tris(2,3-dibromopropyl)phosphate | 50µg/mL in methanol | 1ml |
| REPBB1315 | Tris(2,3-dichloropropyl)phosphate | 1000µg/mL in methanol | 1ml |
| REPBB1316 | Tris(2-ethylhexyl)phosphate | 1000µg/mL in methanol | 1ml |
| REPBB1317 | Tri-n-butylphosphate-d27 | 100µg/mL in isooctane | 1ml |
| REPBB1318 | Triethylphosphate-d15 | 100µg/mL in isooctane | 1ml |
| REPBB1319 | Trimethylphosphate-d9 | 100µg/mL in isooctane | 1ml |
| REPBB1320 | Triphenylphosphate-d15 | 100µg/mL in isooctane | 1ml |
| REPBB1321 | Tri-n-propylphosphate-d21 | 100µg/mL in isooctane | 1ml |

## PCNs

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPBB1401 | 1-Chloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1402 | 2-Chloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1403 | 1,4-Dichloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1404 | 1,5-Dichloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1405 | 2,3-Dichloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1406 | 2,6-Dichloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1407 | 2,7-Dichloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1408 | 1,2,3,4-Tetrachloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1409 | 1,2,3,4-Tetrachloro-1,2,3,4-tetrahydronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1410 | Octachloronaphthalene | 50µg/mL in Isooctane | 1ml |
| REPBB1411 | Octachloronaphthalene | Neat | 10mg |

## Polybromobiphenyls Multi-Elements Standards

| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPBB01003 | 2,2',4,4',5,5'-Hexabromobiphenyl PBB-153 | each at 50µg/ml | Isooctane:Ethyl acetate | 1ml |
| | 2,2',4,4'-Tetrabromodiphenyl ether BDE-47 | | | |
| | 2,2',4,4',5-Pentabromodiphenyl ether BDE-99 | | | |
| | 2,2',4,4',6-Pentabromodiphenyl ether BDE-100 | | | |
| | 2,2',4,4',5,5'-Hexabromodiphenyl ether BDE-153 | | | |
| REPBB01004 | BDE-47 2,2',4,4'-Tetrabromodiphenyl ether 1962.12-10-IO | each at 10µg/ml | Isooctane | 1ml |
| | BDE-99 2,2',4,4',5-Pentabromodiphenyl ether | | | |
| | BDE-100 2,2',4,4',6-Pentabromodiphenyl ether | | | |
| | BDE-153 2,2',4,4',5,5'-Hexabromodiphenyl ether | | | |
| | BDE-154 2,2',4,4',5,6'-Hexabromodiphenyl ether | | | |
| | BDE-183 2,2',3,4,4',5',6-Heptabromodiphenyl ether | | | |
| | BDE-205 2,3,3',4,4',5,5',6-Octabromodiphenyl ether | | | |
| | BDE-209 Decabromodiphenyl ether | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPBB01005 | 3-Bromodiphenyl ether PBDE-2 | each at 50µg/ml | Toluene | 1ml |
| | 3,4'-Dibromodiphenyl ether PBDE-13 | | | |
| | 2,4,4'-Tribromodiphenyl ether PBDE-28 | | | |
| | 2,3',4,4-Tetrabromodiphenyl ether PBDE-66 | | | |
| | 2,2',3,4,4'-Pentabromodiphenyl ether PBDE-85 | | | |
| | 2,2',3,4,4',5-Hexabromodiphenyl ether PBDE-138 | | | |
| | 2,3,3',4,4',5,6-Heptabromodiphenyl ether PBDE-190 | | | |
| | 2,3,3',4,4',5,5',6-Octabromodiphenyl ether PBDE-205 | | | |
| | 2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether PBDE-206 | | | |
| | Decabromodiphenyl ether PBDE-209 | | | |
| REPBB01006 | 4-Bromodiphenyl ether, PBDE-3 | each at 50µg/ml | Isooctane | 10ml |
| | 4,4'-Dibromodiphenyl ether, PBDE-15 | | | |
| | 3,3',4-Tribromodiphenyl ether, PBDE-35 | | | |
| | 2,3',4,4-Tetrabromodiphenyl ether, PBDE-66 | | | |
| | 2,2',4,4',5-Pentabromodiphenyl ether, PBDE-99 | | | |
| | 2,2',4,4',5,6'-Hexabromodiphenyl ether, PBDE-154 | | | |
| | 2,3,3',4,4',5,6-Heptabromodiphenyl ether, PBDE-190 | | | |
| | 2,2',3,3',4,4',5,6'-Octabromodiphenyl ether, PBDE-196 | | | |
| | 2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether, PBDE-208 | | | |
| | Decabromodiphenyl ether, PBDE-209 | | | |
| REPBB01007 | 2,4,4'-Tribromodiphenyl ether PBDE-28 | each at 100µg/ml | Isooctane | 1ml |
| | 2,2',4,4'-Tetrabromodiphenyl ether PBDE-47 | | | |
| | 2,3',4,4'-Tetrabromodiphenyl ether PBDE-66 | | | |
| | 2,2',3,4,4'-Pentabromodiphenyl ether PBDE-85 | | | |
| | 2,2',4,4',5-Pentabromodiphenyl ether PBDE-99 | | | |
| | 2,2',4,4',6-Pentabromodiphenyl ether PBDE-100 | | | |
| | 2,2',4,4',5,5'-Hexabromodiphenyl ether PBDE-153 | | | |
| | 2,2',4,4',5,6'-Hexabromodiphenyl ether PBDE-154 | | | |
| | 2,2',3,4,4',5',6-Heptabromodiphenyl ether PBDE-183 | | | |
| REPBB01008 | 2,4,4'-Tribromodiphenyl ether PBDE-28 | each at 10µg/ml | Cyclohexane | 1ml |
| | 2,2',4,4'-Tetrabromodiphenyl ether PBDE-47 | | | |
| | 2,2',4,4',5-Pentabromodiphenyl ether PBDE-99 | | | |
| | 2,2',4,4',6-Pentabromodiphenyl ether PBDE-100 | | | |
| | 2,2',4,4',5,5'-Hexabromodiphenyl ether PBDE-153 | | | |
| | 2,2',4,4',5,6'-Hexabromodiphenyl ether PBDE-154 | | | |
| | 2,2',3,4,4',5',6'-Heptabromodiphenyl ether PBDE-183 | | | |
| | Decabromodiphenyl ether PBDE-209 | | | |
| REPBB01009 | PBDE 28 | each at 10µg/ml | Isooctane | 1ml |
| | PBDE-99 | | | |
| | PBDE-100 | | | |
| | PBDE-153 | | | |
| | PBDE-154 | | | |
| REPBB01010 | 2,4,4'-Tribromodiphenyl ether PBDE-28 | each at 100µg/ml | Cyclohexane | 10ml |
| | 2,2',4,4'-Tetrabromodiphenyl ether PBDE-47 | | | |
| | 2,2',4,4',5-Pentabromodiphenyl ether PBDE-99 | | | |
| | 2,2',4,4',6-Pentabromodiphenyl ether PBDE-100 | | | |
| | 2,2',4,4',5,6'-Hexabromodiphenyl ether PBDE-154 | | | |
| | 2,2',3,4,4',5',6-Heptabromodiphenyl ether PBDE-183 | | | |
| | Decabromodiphenyl ether PBDE-209 | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPBB01011 | PBDE-28 | each at 50µg/ml | Toluene | 1ml |
| | PBDE-47 | | | |
| | PBDE-66 | | | |
| | PBDE-99 | | | |
| | PBDE-100 | | | |
| | PBDE-119 | | | |
| | PBDE-138 | | | |
| | PBDE-153 | | | |
| | PBDE-154 | | | |
| | PBDE-183 | | | |
| REPBB01012 | PBDE-153 | each at 100µg/ml | Cyclohexane | 10ml |
| | PBDE-196 | | | |
| REPBB01013 | 2,2',3,3',4,4',5,6'-Octabromodiphenyl ether PBDE-196 | each at 50µg/ml | Toluene | 1ml |
| | 2,2',3,3',4,4',5,5',6-Nonabromodiphenyl ether PBDE-206 | | | |
| | 2,2',3,3',4,5,5',6,6'-Nonabromodiphenyl ether PBDE-208 | | | |
| | Decabromodiphenyl ether PBDE-209 | | | |
| REPBB01014 | 4-Bromobiphenyl PBB-3 | each at 30µg/ml | Toluene or Isooctane | 10ml |
| | 4,4'-Dibromobiphenyl PBB-15 | | | |
| | 2,2',5-Tribromobiphenyl PBB-18 | | | |
| | 2,2',5,5'-Tetrabromobiphenyl PBB-52 | | | |
| | 2,2',4,5',6-Pentabromobiphenyl PBB-103 | | | |
| | 2,2',4,4',5,5'-Hexabromobiphenyl PBB-153 | | | |
| | 2,2',3,4,4',5,5'-Heptabromobiphenyl PBB-180 | | | |
| | 2,2',3,3',4,4',5,5'-Octabromobiphenyl PBB-194 | | | |
| | 2,2',3,3',4,4',5,5',6-Nonabromobiphenyl PBB-206 | | | |
| | Decabromobiphenyl PBB-209 | | | |


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## C8-C9 PCAs

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPCA10001 | 1,2-Dichlorooctane | 1000µg/mL in isooctane | 1ml |
| REPCA10002 | 1,1,1,3-Tetrachlorooctane | 1000µg/mL in isooctane | 1ml |
| REPCA10003 | 1,2,7,8-Tetrachlorooctane | 1000µg/mL in isooctane | 1ml |
| REPCA10004 | 1,1,1,3,6,8,8,8-Octachlorooctane | 1000µg/mL in isooctane | 1ml |
| REPCA10005 | 1,2-Dichlorononane | 1000µg/mL in isooctane | 1ml |
| REPCA10006 | 1,1,1,3-Tetrachlorononane | 1000µg/mL in isooctane | 1ml |
| REPCA10007 | 1,2,8,9-Tetrachlorononane | 1000µg/mL in isooctane | 1ml |
| REPCA10008 | 1,1,1,3,8,9-Hexachlorononane | 1000µg/mL in isooctane | 1ml |

## C10-C13 PCAs (SCCPs)

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPCA1101 | 1,2-Dichlorodecane | 100µg/mL in isooctane | 1ml |
| REPCA1102 | 1,1,1,3-Tetrachlorodecane | 100µg/mL in isooctane | 1ml |
| REPCA1103 | 1,2,9,10-Tetrachlorodecane | 100µg/mL in isooctane | 1ml |
| REPCA1104 | 1,1,1,3,9,10-Hexachlorodecane | 100µg/mL in isooctane | 1ml |
| REPCA1105 | 1,1,1,3,8,10,10,10-Octachlorodecane | 100µg/mL in isooctane | 1ml |
| REPCA1106 | 1,2-Dichloroundecane | 100µg/mL in isooctane | 1ml |
| REPCA1107 | 1,1,1,3-Tetrachloroundecane | 100µg/mL in isooctane | 1ml |
| REPCA1108 | 1,2,10,11-Tetrachloroundecane | 100µg/mL in isooctane | 1ml |
| REPCA1109 | 1,1,1,3,10,11-Hexachloroundecane | 100µg/mL in isooctane | 1ml |
| REPCA1110 | 1,1,1,3,9,11,11,11-Octachloroundecane | 100µg/mL in isooctane | 1ml |
| REPCA1111 | 1,2-Dichlorododecane | 100µg/mL in isooctane | 1ml |
| REPCA1112 | 1,12-Dichlorododecane | 100µg/mL in isooctane | 1ml |
| REPCA1113 | 1,1,1,3-Tetrachlorododecane | 100µg/mL in isooctane | 1ml |
| REPCA1114 | 1,2,11,12-Tetrachlorododecane | 100µg/mL in isooctane | 1ml |
| REPCA1115 | 1,1,1,3,11,12-Hexachlorododecane | 100µg/mL in isooctane | 1ml |
| REPCA1116 | 1,1,1,3,10,12,12,12-Octachlorododecane | 100µg/mL in isooctane | 1ml |
| REPCA1117 | 1,2-Dichlorotridecane | 100µg/mL in isooctane | 1ml |
| REPCA1118 | 1,1,1,3-Tetrachlorotridecane | 100µg/mL in isooctane | 1ml |
| REPCA1119 | 1,1,1,3,12,13-Hexachlorotridecane | 100µg/mL in isooctane | 1ml |
| REPCA1120 | 1,1,1,3,11,13,13,13-Octachlorotridecane | 100µg/mL in isooctane | 1ml |

## C14+ PCAs (MCCPs)

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPCA1201 | 1,2-Dichlorotetradecane | 1000µg/mL in isooctane | 1ml |
| REPCA1202 | 1,1,1,3-Tetrachlorotetradecane | 1000µg/mL in isooctane | 1ml |
| REPCA1203 | 1,2,13,14-Tetrachlorotetradecane | 1000µg/mL in isooctane | 1ml |
| REPCA1204 | 1,1,1,3,12,14,14,14-Octachlorotetradecane | 1000µg/mL in isooctane | 1ml |
| REPCA1205 | 1,1,1,3,14,15-Hexachloropentadecane | 1000µg/mL in isooctane | 1ml |
| REPCA1206 | 1,1,1,3,14,16,16,16-Octachlorohexadecane | 1000µg/mL in isooctane | 1ml |
| REPCA1207 | 1,1,1,3,15,17,17,17-Octachloroheptadecane | 1000µg/mL in isooctane | 1ml |
| REPCA1208 | 1-Chlorooctadecane | 10000µg/mL in dichlorom | 1ml |
| REPCA1209 | 1,1,1,3,16,18,18,18-Octachlorooctadecane | 1000µg/mL in isooctane | 1ml |
| REPCA1210 | 1,1,1,3,17,19,19,19-Octachlorononadecane | 1000µg/mL in isooctane | 1ml |
| REPCA1211 | 1,1,1,3,18,20,20,20-Octachloroeicosane | 1000µg/mL in isooctane | 1ml |

## PCBs

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPCA1311 | Chlorinated paraffins (Cl:40%), technical mix | 1000µg/mL in isooctane | 1ml |


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## PCBs F-PCBs, Internal standards for PCBs

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPCB9001-I | 3,3'-Difluorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9002-I | 4-Chloro-2'-fluorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9003-I | 4-Chloro-4'-fluorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9004-I | 3'-Fluoro-3,5-dichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9005-I | 3-Fluoro-4,4'-dichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9006-I | 3-Fluoro-2,2',5-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9007-I | 3'-Fluoro-2,3,4'-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9008-I | 3'-Fluoro-2,4,4'-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9009-I | 3'-Fluoro-2,4,5-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9010-I | 2'-Fluoro-2,4,6-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9011-I | 3'-Fluoro-2,4,6-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9012-I | 4'-Fluoro-2,4,6-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9013-I | 3'-Fluoro-3,4,4'-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9014-I | 3'-Fluoro-3,4',5-trichlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9015-I | 3-Fluoro-2,2',4,4'-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9016-I | 3-Fluoro-2,2',5,5'-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9017-I | 3'-Fluoro-2,3,5,6-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9018-I | 4-Amino-3'-fluoro-2,3,5,6-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9019-I | 4'-Fluoro-2,3',4,5-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9020-I | 5'-Fluoro-2,3',4,5-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9021-I | 3-Fluoro-2,3',4',5-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9022-I | 3'-Fluoro-2,4,4',5-tetrachlorobiphenyl | 100µg/mL in isooctane | 1ml |
| REPCB9023-I | 5-Fluoro-3,3',4,4'-tetrachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9024-I | 5,5'-Difluoro-3,3',4,4'-tetrachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9025-I | 3'-Fluoro-3,4,4',5-tetrachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9026-I | 3'-Fluoro-2,2',4,5,5'-pentachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9027-I | 5'-Fluoro-2,3,3',4,4'-pentachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9028-I | 3'-Fluoro-2,3,4,4',5-pentachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9029-I | 3'-Fluoro-2,3,4,5,6-pentachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9030-I | 3'-Fluoro-2,3,4',5,6-pentachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9031-I | 5'-Fluoro-2,3',4,4',5-pentachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9032-I | 5'-Fluoro-3,3',4,4',5-pentachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9033-I | 5'-Fluoro-2,3,3',4,4',5-hexachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9034-I | 2'-Fluoro-2,3,3',4,5,6-hexachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9035-I | 5'-Fluoro-2,3,3',4,5,6-hexachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9036-I | 4'-Fluoro-2,3,3',4,5,6-hexachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9037-I | 3'-Fluoro-2,3,4,4',5,6-hexachlorobiphenyl | 50µg/mL in isooctane | 1ml |
| REPCB9038-I | 5'-Fluoro-2,3,3',4,4',5,6-heptachlorobiphenyl | 50µg/mL in isooctane | 1ml |


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# PCBs Multi-Element Standards

| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPCB01005 | 2,2,5- Trichlorobiphenyl PCB18 | each at 200µg/ml | n-Hexane | 1.1 ml |
| | 2,4,4`-Trichlorobiphenyl PCB28 | | | |
| | 2,4,5`-Trichlorobiphenyl PCB31 | | | |
| | 2,2`,3,5`-Tetrachlorobiphenyl PCB44 | | | |
| | 2,2`,5,5`-Tetrachlorobiphenyl PCB52 | | | |
| | 2,2`,4,5,5`-Pentachlorobiphenyl PCB101 | | | |
| | 2,3`,4,4`,5-Pentachlorobiphenyl PCB118 | | | |
| | 2,2`,3,4,4`,5`-Hexachlorobiphenyl PCB138 | | | |
| | 2,2`,3,4`,5`,6-Hexachlorobiphenyl PCB149 | | | |
| | 2,2`,4,4`,5,5`-Hexachlorobiphenyl PCB153 | | | |
| | 2,2`,3,3`,4,4`,5-Heptachlorobiphenyl PCB170 | | | |
| | 2,2`,3,4,4`,5,5`-Heptachlorobiphenyl PCB180 | | | |
| | 2,2`,3,3`,4,4`,5,5`-Octachlorobiphenyl PCB194 | | | |
| REPCB01006 | 2,4,4'-Trichlorobiphenyl PCB 28 | each at 10µg/ml | Acetonitrile | 1.1 ml |
| | 2,2'5,5'-Tetrachlorobiphenyl PCB 52 | | | |
| | 2,2'4,5,5'-Pentachlorobiphenyl PCB 101 | | | |
| | 2,2',3,4,4',5-Hexachlorobiphenyl PCB 138 | | | |
| | 2,2'4,4'5,5'-Hexachlorobiphenyl PCB 153 | | | |
| | 2,2',3,4,4',5,5'-Heptachlorophenyl PCB 180 | | | |
| | 2,2',3,3',4,4',5,5'-Octachlorophenyl PCB 194 | | | |
| REPCB01007 | 2,4,4'-Trichlorobiphenyl PCB 28 | each at 1mg | Neat | 7x1mg |
| | 2,2',5,5'-Tetrachlorobiphenyl PCB 52 | | | |
| | 2,2',4,5,5'-Pentachlorobiphenyl PCB 101 | | | |
| | 2,3',4,4',5-Pentachlorobiphenyl PCB 118 | | | |
| | 2,2',3,4,4',5-Hexachlorobiphenyl PCB 138 | | | |
| | 2,2',4,4',5,5'-Hexachlorobiphenyl PCB 153 | | | |
| | 2,2',3,4,4',5,5'-Heptachlorobiphenyl PCB 180 | | | |
| REPCB01008 | 3,3'4,4'-TetraCB PCB-77 | each at 20ng/ml | n-Nonane | 1.1 ml |
| | 3,4,4',5-TetraCB PCB-81 | | | |
| | 2,3,3',4,4'-PentaCB PCB-105 | | | |
| | 2,3,4,4',5-PentaCB PCB-114 | | | |
| | 2',3,4,4',5-PentaCB PCB-123 | | | |
| | 3,3',4,4',5-PentaCB PCB-126 | | | |
| | 2,3,3',4,4',5-HexaCB PCB-156 | | | |
| | 2,3,3',4',5'-HexaCB PCB-157 | | | |
| | 2,3',4,4',5,5'-HexaCB PCB-167 | | | |
| | 3,3,4,4',5,5'-HexaCB PCB-169 | | | |
| | 2,2',3,4,4'5-HeptaCB PCB-170 | | | |
| | 2,2',3,3',4,4',5,5'-HeptaCB PCB-180 | | | |
| | 2,3,3',4,4',5,5'-HeptaCB PCB-189 | | | |
| REPCB01009 | PCB-28 | each at 100µg/ml | n-Hexane | 1.1 ml |
| | PCB-31 | | | |
| | PCB-49 | | | |
| | PCB-52 | | | |
| | PCB-101 | | | |
| | PCB-118 | | | |
| | PCB-138 | | | |
| | PCB-153 | | | |
| | PCB-169 | | | |
| | PCB-170 | | | |
| | PCB-180 | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPCB09001-I | 3,3',4,4'-Tetrachlorobiphenyl PCB 77 | each at 5000µg/ml | Dichloromethane | 1.1 ml |
| | Naphthalene-d8 | | | |
| | Phenanthrene-d10 | | | |
| | Fluoranthene-d10 | | | |
| | Benzo[a]pyrene-d12 | | | |
| | Dibenz[a,h]anthracene-d14 | | | |
| REPCB09002-I | Naphthalene | each at 10µg/ml | Methanol | 10ml |
| | Phenanthrene | | | |
| | Benzo[a]pyrene | | | |
| | 2,2',4,5,5'-Pentachlorobiphenyl PCB 101 | | | |
| | 2,2',3,4,4',5,5'-Heptachlorobiphenyl PCB 180 | | | |
| REPCB09003-I | Naphthalene | each at 10µg/ml | Dichloromethane | 1.1 ml |
| | Acenaphthylene | | | |
| | Acenaphthene | | | |
| | Fluorene | | | |
| | Phenanthrene | | | |
| | Anthracene | | | |
| | Fluoranthene | | | |
| | Pyrene | | | |
| | Benz[a]anthracene | | | |
| | Chrysene | | | |
| | Dibenzo[b,k]fluoranthene | | | |
| | Benzo[a]pyrene | | | |
| | Indeno[1,2,3-cd]pyrene | | | |
| | Dibenz[a,h]anthracene | | | |
| | Benzo(ghi)perylene | | | |
| | 2,4,4'-Trichlorobiphenyl PCB 28 | | | |
| | 2,2',5,5'-Tetrachlorobiphenyl PCB 52 | | | |
| | 2,2',4,5,5'-Pentachlorobiphenyl PCB 101 | | | |
| | 2,3',4,4',5-Pentachlorobiphenyl PCB 118 | | | |
| | 2,2',3,4,4',5'-Hexachlorobiphenyl PCB 138 | | | |
| | 2,2',4,4',5,5'-Hexachlorobiphenyl PCB 153 | | | |
| | 2,2',3,4,4',5,5'-Heptachlorobiphenyl PCB 180 | | | |
| REPCB09004-I | 5-F-3,3',4,4'-TetraCB F-PCB-77 | each at 20ng/ml | n-Nonane | 1ml |
| | 3'-F-3,4,4',5-TetraCB F-PCB-81 | | | |
| | 5'-F-2,3,3',4,4'-PentaCB F-PCB-105 | | | |
| | 3'-F-2,3,4,4',5-PentaCB F-PCB-114 | | | |
| | 5'-F-3,3',4,4',5-PentaCB F-PCB-126 | | | |
| | 5'-F-2,3,3',4,4',5-HexaCB F-PCB-156 | | | |
| | 3'-F-2,3,4,4',5,6-HexaCB F-PCB-166 (PCB-167,169) | | | |
| | 5'-F-2,3,3',4,4',5,6-HeptaCB F-PCB-190 (PCB-189) | | | |
| REPCB09005-I | 3'-F-PCB 28 | each at 10µg/ml | Isooctane | 1 ml |
| | 3-F-PCB 52 | | | |
| | 3'-F-PCB-101 | | | |
| | 5'-F-PCB 118 | | | |
| | 5'-F-PCB 156 | | | |
| | 3'-F-PCB 166 | | | |
| | 5'-F-PCB 190 | | | |
| REPCB09006-I | PCB 28 -d4 | each at 100µg/ml | n-Nonane | 1 ml |
| | PCB 52 -d3 | | | |
| | PCB 101- d3 | | | |
| REPCB09007-I | 3'-Fluoro-2,4,4'-trichlorobiphenyl 3'-F-PCB-28 | each at 100µg/ml | Acetone | 10ml |
| | 5'-Fluoro-2,3',4,4',5-pentachlorobiphenyl 5'-F-PCB-118 | | | |


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## PFA Sulfonic acids

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPFA1001 | Perfluorobutane sulfonic acid | 50 ug/ml in methanol | 1ml |
| REPFA1002 | Perfluorobutane sulphonate, potassium salt | 50µg/mL in methanol | 1ml |
| REPFA1003 | Perfluorohexane sulfonylfluoride | Neat | 100mg |
| REPFA1004 | Perfluorohexane sulfonic acid, potassium salt | 50ug/ml in methanol | 1ml |
| REPFA1005 | Perfluorooctane sulfonic acid | 50ug/ml in methanol | 1ml |
| REPFA1006 | Perfluorooctane sulfonylfluoride | Neat | 100mg |
| REPFA1007 | Perfluoro-4-ethylcyclohexane sulfonic acid, potassium salt | 50µg/mL in methanol | 1ml |
| REPFA1008 | 1H,1H,2H,2H-Perfluorooctane sulfonic acid | 50µg/mL in methanol | 1ml |
| REPFA1009 | Perfluorooctane sulfonamide | 50 ug/ml in acetonitrile | 1ml |
| REPFA1010 | Perfluoropropionic acid, sodium salt | 50µg/mL in methanol | 1ml |
| REPFA1011 | Perfluorobutyric acid | 50µg/mL in methanol | 1ml |
| REPFA1012 | Perfluorobutyric acid, sodium salt | 50µg/mL in methanol | 1ml |
| REPFA1013 | 5H-Perfluoropentanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1014 | n-Perfluoropentanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1015 | Perfluorohexanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1016 | Perfluorocyclohexanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1017 | 7H-Perfluoroheptanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1018 | n-Perfluoroheptanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1019 | n-Perfluorooctanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1020 | n-Perfluorooctanoic acid, ammonium salt | 50µg/mL in methanol | 1ml |
| REPFA1021 | Perfluoroctanonic acid, sodium salt | 50µg/mL in methanol | 1ml |
| REPFA1022 | 9H-Perfluorononanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1023 | Perfluorononanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1024 | n-Perfluorodecanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1025 | Perfluoro-3,7-dimethyloctanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1026 | 11H-Perfluoroundecanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1027 | Perfluoroundecanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1028 | n-Perfluorododecanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1029 | Perfluorotetradecanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1030 | Perfluorohexadecanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1031 | Perfluorooctadecanoic acid | 50µg/mL in methanol | 1ml |
| REPFA1032 | Perfluorobutyramide | 50µg/mL in methanol | 1ml |
| REPFA1033 | Perfluorooctanamide | 50µg/mL in methanol | 1ml |
| REPFA1034 | 3,3,4,4,4-Perfluorobutan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1035 | 1H,1H,5H-Perfluoropentan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1036 | 1H,1,H,2H,2,H-Perfluorohexan-1-ol (2-Perfluorobutyl ethanol) | 50µg/mL in methanol | 1ml |
| REPFA1037 | 1H,1H,2H,2H,3H,3H-Perfluorohexan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1038 | 1H,1H-Perfluorohexan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1039 | 1H,1H,7H-Perfluoroheptan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1040 | 1H,1H-Perfluoroheptan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1041 | 1H,1H,2H,2H-Perfluorooctan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1042 | 1H,1H,8H-Perfluorooctane-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1043 | 1H,1H-Perfluorooctane-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1044 | 1H,1H,2H,2H,3H,3H-Perfluorononan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1045 | 1H,1H,2H,2H-Perfluoro-7-methyloctan-1-ol | 50µg/mL in methanol | 1ml |


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## PFA Sulfonic acids

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPFA1046 | 1H,1H,9H-Perfluorononan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1047 | 1H,1H-Perfluorononan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1048 | 1H,1H,10H,10H-Perfluoro-1,10-decanediol | 50µg/mL in methanol | 1ml |
| REPFA1049 | 1H,1H,2H,2H-Perfluorodecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1050 | 1H,1H-Perfluorodecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1051 | 1H,1H-Perfluoro-3,7-dimethyloctan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1052 | 1H,1H,2H,2H-Perfluoro-9-methyldecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1053 | 1H,1H,11H-Perfluoroundecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1054 | 1H,1H-Perfluoroundecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1055 | 1H,1H,2H,2H-Perfluorododecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1056 | 1H,1H,13H-Perfluorotridecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1057 | 1H,1H-Perfluorotetradecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1058 | 1H,1H-Perfluorohexadecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1059 | 1H,1H-Perfluorooctadecan-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1060 | 1H,1H,2H,3H-Perfluorohex-2-en-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1061 | 1H,1H,2H,3H-Perfluoronon-2-en-1-ol | 50µg/mL in methanol | 1ml |
| REPFA1062 | 1D,1D,2H,2H-1-Hydroxyperfluorododecane | Neat | 10mg |
| REPFA1063 | 7H-Perfluoroheptanal | 50µg/mL in methanol | 1ml |
| REPFA1064 | 1H,1,H,2H,2H-Perfluorodecyl acrylate | 50µg/mL in methanol | 1ml |
| REPFA1065 | 1H,1,H,2H,2H-Perfluorodecyl acrylate-d3 | 50µg/mL in methanol | 1ml |
| REPFA1066 | 1H,1,H,2H,2H-Perfluorodecyl methacrylate | 50µg/mL in methanol | 1ml |
| REPFA1067 | 1H,1,H,2H,2H-Perfluorodecyl methacrylate-d5 | 50µg/mL in methanol | 1ml |


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# Phenol Mixed Standards

| Product No. | Description | Concentration | US EPA Methods | Packed in Ampoule |
|---|---|---|---|---|
| REPHE001 (11 Compound Mix) | 2-Chlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2-Methyl-4,6-dinitrophenol (DNOC)<br>2-Nitrophenol<br>4-Nitrophenol<br>Pentachlorophenol<br>Phenol<br>2,4,6-Trichlorophenol<br>4-Chloro-3-methylphenol<br>2,4-Dinitrophenol | Each analyte at 2,000µg/ml in high-purity Dichloromethane (Methylene Chloride) | 604 | 1ml |
| REPHE002 (7 Compound Mix) | 2,6-Dichlorophenol<br>2-Methylphenol<br>3-Methylphenol<br>4-Methylphenol<br>2,4,5-Trichlorophenol<br>2,3,4,6-Tetrachlorophenol<br>2-sec-Butyl-4,6-dinotrophenol (Dinoseb) | Each analyte at 2,000µg/ml in high-purity Dichloromethane (Methylene Chloride) | 604 | 1ml |
| REPHE003 (11 Compound Mix) | 2-Chlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2-Methyl-4,6-dinitrophenol (DNOC)<br>2-Nitrophenol<br>4-Nitrophenol<br>Pentachlorophenol<br>Phenol<br>2,4,6-Trichlorophenol<br>4-Chloro-3-methylphenol<br>2,4-Dinitrophenol | Each analyte at 2,000µg/ml in high-purity Methanol | 604<br>625 | 1ml |
| REPHE004 (5 Compound Mix) | 4-Chloro-3-methylphenol<br>2-Chlorophenol<br>4-Nitrophenol<br>Pentachlorophenol<br>Phenol | Each analyte at 2,000µg/ml in high-purity Methanol | 604<br>625 | 1ml |
| REPHE005 (18 Compound Mix) | 2-Chlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2-Methyl-4,6-dinitrophenol (DNOC)<br>2-Nitrophenol<br>4-Nitrophenol<br>Pentachlorophenol<br>Phenol<br>2,4,6-Trichlorophenol<br>4-Chloro-3-methylphenol<br>2,4-Dinitrophenol<br>2,6-Dichlorophenol<br>2-Methylphenol<br>3-Methylphenol<br>4-Methylphenol<br>2,4,5-Trichlorophenol<br>2,3,4,6-Tetrachlorophenol<br>2-sec-Butyl-4,6-dinotrophenol (Dinoseb) | Each analyte at 2,000µg/ml in high-purity Isopropanol | 8270 | 1ml |


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# Phenol Mixed Standards

| Product No. | Description | Concentration | US EPA Methods | Packed in Ampoule |
|---|---|---|---|---|
| REPHE006<br>(13 Compound Mix) | 4-Chloro-3-methylphenol<br>2-Chlorophenol<br>2,4-Dichlorophenol<br>2,6-Dichlorophenol<br>2,4-Dimethylphenol<br>2,4-Dinitrophenol<br>2-Methyl-4,6-dinitrophenol (DNOC)<br>2-Nitrophenol<br>4-Nitrophenol<br>Pentachlorophenol<br>Phenol<br>2,3,4,6-Tetrachlorophenol<br>2,4,6-Trichlorophenol | Each analyte at 2,000µg/ml in high-purity Methanol | 8270 | 1ml |
| REPHE007<br>(11 Compound Mix) | 4-Chloro-3-methylphenol<br>2-Chlorophenol<br>2,4-Dichlorophenol<br>2,4-Dimethylphenol<br>2-Methyl-4,6-dinitrophenol (DNOC)<br>2,4-Dinitrophenol<br>2-Nitrophenol<br>4-Nitrophenol<br>Pentachlorophenol<br>Phenol<br>2,4,6-Trichlorophenol | Each analyte at 2,000µg/ml in high-purity Methanol | 8270 | 1ml |
| REPHE008<br>(5 Compound Mix) | 4-Chloro-3-methylphenol<br>2-Chlorophenol<br>4-Nitrophenol<br>Pentachlorophenol<br>Phenol | Each analyte at 2,000µg/ml in high-purity Dichloromethane (Methylene Chloride) | 8270 | 1ml |
| REPHE009<br>(6 Compound Mix) | 4-Chloro-3-methylphenol<br>2,4-Dinitrophenol<br>2-Nitrophenol<br>Pentachlorophenol<br>Phenol<br>2,4,6-Trichlorophenol | Each analyte at 2,000µg/ml in high-purity Dichloromethane (Methylene Chloride) | 8270 | 1ml |
| REPHE010<br>(6 Compound Mix) | 2-Methylphenol<br>3-Methylphenol<br>4-Methylphenol<br>Pentachlorophenol<br>2,4,6-Trichlorophenol<br>2,4,5-Trichlorophenol | Each analyte at 2,000µg/ml in high-purity Dichloromethane (Methylene Chloride) | 1311 | 1ml |


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| Product No. Packed in 1ml Ampoule | Description - Each at 100µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE015 (17 compound mix) | 2,3,4,6-Tetrachlorophenol |
| | 2,4,5-Trichlorophenol |
| | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2,6-Dichlorophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Methylphenol |
| | 2-Nitrophenol |
| | 3-Methylphenol |
| | 4-Chloro-3-methylphenol |
| | 4-Methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 5000µg/ml in Methylene Chloride |
|---|---|
| REPHE016 (14 compound mix) | 2,4,5-Trichlorophenol |
| | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Methylphenol |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Methylene Chloride |
|---|---|
| REPHE017 (14 compound mix) | 2,4,5-Trichlorophenol |
| | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Methylphenol |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 1000µg/ml in Methylene Chloride |
|---|---|
| REPHE018 (14 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2,6-Dichlorophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Methylphenol |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 1000µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE020 (12 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 3-Methylphenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Methylene Chloride |
|---|---|
| REPHE023 (12 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Methylphenol |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |


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| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Isopropanol |
|---|---|
| REPHE024 (11 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 500µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE026 (11 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 20µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE028 (11 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 1,000µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE029 (11 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 500µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE030 (11 compound mix) | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 2-sec-Butyl-4,6-dinotrophenol (Dinoseb) |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Methylene Chloride |
|---|---|
| REPHE030 (11 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Nitrophenol |
| | 2-sec-Butyl-4,6-dinotrophenol (Dinoseb) |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 1000µg/ml in Methylene Chloride |
|---|---|
| REPHE034 (11 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2,4-Dinitrophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |


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| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Methylene Chloride |
|---|---|
| REPHE037 (9 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2,4-Dimethylphenol |
| | 2-Chlorophenol |
| | 2-Methylphenol |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Methylphenol |
| | Phenol |

| Product No. Packed 1ml Ampoule | Description - Each at 2000µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE038 (8 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2-Chlorophenol |
| | 2-Methylphenol |
| | 3-Methylphenol |
| | 4-Methylphenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 100µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE039 (8 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2-Chlorophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 3-Methylphenol |
| | 4-Methylphenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Isopropanol |
|---|---|
| REPHE040 (7 compound mix) | 2,3,4,6-Tetrachlorophenol |
| | 2,4,5-Trichlorophenol |
| | 2,6-Dichlorophenol |
| | 2-Methylphenol |
| | 2-sec-Butyl-4,6-dinotrophenol (Dinoseb) |
| | 3-Methylphenol |
| | 4-Methylphenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Methylene Chloride |
|---|---|
| REPHE041 (6 compound mix) | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | 2-Nitrophenol |
| | 4-Chloro-3-methylphenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE042 (5 compound mix) | 2-Chlorophenol |
| | 4-Chloro-3-methylphenol |
| | 4-Nitrophenol |
| | Pentachlorophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Methylene Chloride |
|---|---|
| REPHE045 (5 compound mix) | 2,4-Dimethylphenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 2-Nitrophenol |
| | 4-Nitrophenol |
| | Phenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml Methylene Chloride |
|---|---|
| REPHE046 (5 compound mix) | 2,4,5-Trichlorophenol |
| | 2-Methylphenol |
| | 2-sec-Butyl-4,6-dinotrophenol (Dinoseb) |
| | 3-Methylphenol |
| | 4-Methylphenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 100µg/ml in Purge & Trap Methanol |
|---|---|
| REPHE047 (4 compound mix) | 2,3,4,6-Tetrachlorophenol |
| | 2,4,6-Trichlorophenol |
| | 2,4-Dichlorophenol |
| | Pentachlorophenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 4000µg/ml in Methylene Chloride |
|---|---|
| REPHE048 (4 compound mix) | 2,4-Dinitrophenol |
| | 2-Methyl-4,6-dinitrophenol (DNOC) |
| | 4-Nitrophenol |
| | Pentachlorophenol |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Ethanol |
|---|---|
| REPHE050 (3 compound mix) | 2,3,4,6-Tetrachlorophenol |
| | 2,4,6-Trichlorophenol |
| | Pentachlorophenol |


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| Product No. Packed in 1ml Ampoule | Description - Each in Purge & Trap Methanol | Concentration µg/ml |
|---|---|---|
| REPHE022 (12 compound mix) | 2,4,6-Trichlorophenol | 100 |
| | 2,4-Dichlorophenol | 100 |
| | 2,4-Dimethylphenol | 100 |
| | 2,4-Dinitrophenol | 500 |
| | 2-Chlorophenol | 100 |
| | 2-Methyl-4,6-dinitrophenol (DNOC) | 500 |
| | 2-Methylphenol | 100 |
| | 2-Nitrophenol | 100 |
| | 4-Chloro-3-methylphenol | 100 |
| | 4-Nitrophenol | 500 |
| | Pentachlorophenol | 500 |
| | Phenol | 100 |
| REPHE025 (11 compound mix) | 2,4,6-Trichlorophenol | 500 |
| | 2,4-Dichlorophenol | 500 |
| | 2,4-Dimethylphenol | 500 |
| | 2,4-Dinitrophenol | 1500 |
| | 2-Chlorophenol | 500 |
| | 2-Methyl-4,6-dinitrophenol (DNOC) | 2500 |
| | 2-Nitrophenol | 500 |
| | 4-Chloro-3-methylphenol | 2500 |
| | 4-Nitrophenol | 2500 |
| | Pentachlorophenol | 2500 |
| | Phenol | 600 |
| REPHE027 (11 compound mix) | 2,4,6-Trichlorophenol | 1500 |
| | 2,4-Dichlorophenol | 500 |
| | 2,4-Dimethylphenol | 500 |
| | 2,4-Dinitrophenol | 1500 |
| | 2-Chlorophenol | 500 |
| | 2-Methyl-4,6-dinitrophenol (DNOC) | 2500 |
| | 2-Nitrophenol | 500 |
| | 4-Chloro-3-methylphenol | 2500 |
| | 4-Nitrophenol | 2500 |
| | Pentachlorophenol | 2500 |
| | Phenol | 500 |
| REPHE044 (5 compound mix) | 2,4,6-Trichlorophenol | 40 |
| | 2,4-Dichlorophenol | 40 |
| | 3-Methylphenol | 40 |
| | 4-Nitrophenol | 10 |
| | Pentachlorophenol | 40 |


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| Product No. Packed in 1ml Ampoule | Description - Each in Methylene Chloride | Concentration µg/ml | US EPA Methods |
|---|---|---|---|
| REPHE019 | 2,4,6-Trichlorophenol | 1000 | 526 |
| (13 compound mix) | 2,4-Dichlorophenol | 1000 | 528 |
| | 2,4-Dimethylphenol | 1000 | |
| | 2,4-Dinitrophenol | 5000 | |
| | 2,6-Dichlorophenol | 1000 | |
| | 2-Chlorophenol | 1000 | |
| | 2-Methyl-4,6-dinitrophenol (DNOC) | 1000 | |
| | 2-Methylphenol | 1000 | |
| | 2-Nitrophenol | 1000 | |
| | 4-Chloro-3-methylphenol | 1000 | |
| | 4-Nitrophenol | 1000 | |
| | Pentachlorophenol | 1000 | |
| | Phenol | 1000 | |

| Product No. Packed in 1ml Ampoule | Description - Each in Purge & Trap Methanol | Concentration µg/ml | US EPA Methods |
|---|---|---|---|
| REPHE021 | 2,4-Dichlorophenol | 1000 | 525 |
| (12 compound mix) | 2,4-Dimethylphenol | 1000 | |
| | 2,4-Dinitrophenol | 5000 | |
| | 2,6-Dichlorophenol | 1000 | |
| | 2-Chlorophenol | 1000 | |
| | 2-Methyl-4,6-dinitrophenol (DNOC) | 5000 | |
| | 2-Methylphenol | 1000 | |
| | 2-Nitrophenol | 1000 | |
| | 4-Chloro-3-methylphenol | 1000 | |
| | 4-Nitrophenol | 1000 | |
| | Pentachlorophenol | 1000 | |
| | Phenol | 1000 | |

| Product No. Packed in 1ml Ampoule | Description - Each in Methylene Chloride | Concentration µg/ml | US EPA Methods |
|---|---|---|---|
| REPHE032 | 2,4,6-Trichlorophenol | 1500 | 604 |
| (11 compound mix) | 2,4-Dichlorophenol | 500 | 625 |
| | 2,4-Dimethylphenol | 500 | |
| | 2,4-Dinitrophenol | 1500 | |
| | 2-Chlorophenol | 500 | |
| | 2-Nitrophenol | 500 | |
| | 2-sec-Butyl-4,6-dinotrophenol (Dinoseb) | 2500 | |
| | 4-Chloro-3-methylphenol | 2000 | |
| | 4-Nitrophenol | 2500 | |
| | Pentachlorophenol | 2500 | |
| | Phenol | 500 | |


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| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Methylene Chloride | US EPA Methods |
|---|---|---|
| REPHE033 (11 compound mix) | 2,4-Dichlorophenol | 8270B |
| | 2,4-Dimethylphenol | |
| | 2,4-Dinitrophenol | |
| | 2-Chlorophenol | |
| | 2-Methyl-4,6-dinitrophenol (DNOC) | |
| | 2-Nitrophenol | |
| | 2-sec-Butyl-4,6-dinotrophenol (Dinoseb) | |
| | 4-Chloro-3-methylphenol | |
| | 4-Nitrophenol | |
| | Pentachlorophenol | |
| | Phenol | |

| Product No. Packed in 1ml Ampoule | Description - Each at 100µg/ml in Purge & Trap Methanol | US EPA Methods |
|---|---|---|
| REPHE035 (10 compound mix) | 2,4,6-Trichlorophenol | 625 |
| | 2,4-Dichlorophenol | |
| | 2,4-Dimethylphenol | |
| | 2,4-Dinitrophenol | |
| | 2,6-Dichlorophenol | |
| | 2-Chlorophenol | |
| | 4-Chloro-3-methylphenol | |
| | 4-Nitrophenol | |
| | Pentachlorophenol | |
| | Phenol | |

| Product No. Packed in 1ml Ampoule | Description - Each at 2000µg/ml in Isopropanol | US EPA Methods |
|---|---|---|
| REPHE036 (9 compound mix) | 2,3,4,6-Tetrachlorophenol | 8040 |
| | 2,4,5-Trichlorophenol | |
| | 2,4-Dimethylphenol | |
| | 2,4-Dinitrophenol | |
| | 2,6-Dichlorophenol | |
| | 2-Chlorophenol | |
| | 2-sec-Butyl-4,6-dinotrophenol (Dinoseb) | |
| | 3-Methylphenol | |
| | 4-Methylphenol | |

| Product No. Packed in 1ml Ampoule | Description - Each at 1000µg/ml in Methylene Chloride | US EPA Methods |
|---|---|---|
| REPHE049 (4 compound mix) | 2,4,6-Trichlorophenol | 525 |
| | 2,6-Dichlorophenol | |
| | 2-Methyl-4,6-dinitrophenol (DNOC) | |
| | Phenol | |


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# Phenols Single Compound Standards

| Product No. | Description | Concentration | US EPA Methods | Packed in Ampoule |
|---|---|---|---|---|
| REPHE101 | 2-Chlorophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE102 | 2,4-Dichlorophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE103 | 2,4-Dimethylphenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE104 | 4-Chloro-3-methylphenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE105 | 2-Methyl-4,6-dinitrophenol(DNOC) | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE106 | 2,4-Dinitrophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE107 | 2-Nitrophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE108 | 4-Nitrophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE109 | Pentachlorophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE110 | Phenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE119 | Phenol | 100µg/ml in Methylene Chloride | 604, 627, 8270, 1311 | 1ml |
| REPHE111 | 2,4,6-Trichlorophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE112 | 2,4,5-Trichlorophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE113 | 2,3,4,6-Tetrachlorophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE114 | 2,6-Dichlorophenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE115 | 2-Methylphenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE116 | 3-Methylphenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE117 | 4-Methylphenol | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |
| REPHE118 | Dinoseb | 2000µg/ml in high-purity Methanol | 604, 627, 8270, 1311 | 1ml |

# Phenol Surrogate Standards

| Product No. | Description | Concentration | US EPA Methods | Packed in Ampoule |
|---|---|---|---|---|
| REPHE001-S | 2-Fluorobiphenyl | 1000µg/ml | 625 | 1ml |
| | Nitrobenzene D5 | 1000µg/ml | | |
| | p-Terphenyl-D14 | 1000µg/ml | | |
| | Methyl Orange | 2500µg/ml | | |
| | In 1:1 Dichloromethane:Acetone | | | |
| REPHE005-S | 2-Fluorobiphenyl | 5000µg/ml | 625 | 1ml |
| | Nitrobenzene D5 | 5000µg/ml | | |
| | p-Terphenyl-D14 | 5000µg/ml | | |
| | Methyl Orange | 12500µg/ml | | |
| | In 1:1 Dichloromethane:Acetone | | | |


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## Phenol Surrogate Standards

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPHE9001 | 2,6-Dimethyl-4-(1,1-dimethylpropyl)phenol | 100µg/mL in isooctane | 1ml |

## Phenol PFB (perfluorobenzoyl) derivatives

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPHE10001 | 2,5-Dibromophenol-PFB | 1000µg/mL in isopropanol | 1ml |
| REPHE10002 | 4-Ethylphenol-d9-PFB | 1000µg/mL in isopropanol | 1ml |
| REPHE10003 | 2-Fluorophenol-PFB | 1000µg/mL in isopropanol | 1ml |
| REPHE10004 | 4-Fluoro-2-methylphenol-PFB | 1000µg/mL in isopropanol | 1ml |
| REPHE10005 | 4-Fluoro-3-methylphenol-PFB | 1000µg/mL in isopropanol | 1ml |
| REPHE10006 | 2,4,6-Tribromophenol-PFB | 1000µg/mL in isopropanol | 1ml |

## Phenol P□B (perfluoroben□oyl) derivatives

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPHE1101 | 4-Chlorocatechol | 1000µg/mL in isopropanol | 1ml |
| REPHE1102 | 4,5-Dichlorocatechol | 1000µg/mL in isopropanol | 1ml |
| REPHE1103 | 3,4,5-Trichlorocatechol | 1000µg/mL in isopropanol | 1ml |
| REPHE1104 | Tetrachlorocatechol | 1000µg/mL in isopropanol | 1ml |
| REPHE1105 | 4,5-Dichloroguaiacol | 1000µg/mL in isopropanol | 1ml |
| REPHE1106 | 4,5,6-Trichloroguaiacol | 1000µg/mL in isopropanol | 1ml |
| REPHE1107 | 3,4,5-Trichloroguaiacol | 1000µg/mL in isopropanol | 1ml |
| REPHE1108 | Tetrachloroguaiacol | 1000µg/mL in isopropanol | 1ml |
| REPHE1109 | 4,5-Dichloroveratrole | 1000µg/mL in isopropanol | 1ml |
| REPHE1110 | 3,4,5-Trichloroveratrole | 1000µg/mL in isopropanol | 1ml |
| REPHE1111 | Tetrachloroveratrole | 1000µg/mL in isopropanol | 1ml |
| REPHE1112 | 4-Chloroguaiacol | 1000µg/mL in isopropanol | 1ml |
| REPHE1113 | Trichlorosyringol | 1000µg/mL in isopropanol | 1ml |
| REPHE1114 | 5,6-Dichlorovanillin | 1000µg/mL in isopropanol | 1ml |
| REPHE1115 | 6-Chlorovanillin | 1000µg/mL in isopropanol | 1ml |
| REPHE1116 | 4,6-Dichloroguaiacol | 1000µg/mL in isopropanol | 1ml |
| REPHE1117 | 3,5-Dichlorocatechol | 1000µg/mL in isopropanol | 1ml |
| REPHE1118 | 3,4,6-Trichlorocatechol | 1000µg/mL in isopropanol | 1ml |
| REPHE1119 | 3,4-Dichlorocatechol | 1000µg/mL in isopropanol | 1ml |
| REPHE1120 | 5-Chlorovanillin | 1000µg/mL in isopropanol | 1ml |
| REPHE1121 | 2-Chlorosyringealdehyde | 1000µg/mL in isopropanol | 1ml |
| REPHE1122 | 2,6-Dichlorosyringealdehyde | 1000µg/mL in isopropanol | 1ml |


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## Phenols Multi-Element Standards

| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPHE01001 | Phenol | each at 100µg/ml | Isooctane | 1ml |
| | o-Cresol | | | |
| | m-Cresol | | | |
| | p-Cresol | | | |
| | 2,4-Dimethylphenol | | | |
| | 2,5-Dimethylphenol | | | |
| | 3,5-Dimethylphenol | | | |
| | 4-Ethylphenol | | | |
| | 2-n-Propylphenol | | | |
| | 2,3,5-Trimethylphenol | | | |
| | 4-n-Propylphenol | | | |
| | 2,4,6-Trimethylphenol | | | |
| | 4-tert-Butylphenol | | | |
| | 4-Isopropyl-3-methylphenol | | | |
| | 4-n-Butylphenol | | | |
| | 2-tert-Butyl-4-methylphenol | | | |
| | 4-tert-Butyl-2-methylphenol | | | |
| | 4-n-Pentylphenol | | | |
| | 2,5-Diisopropylphenol | | | |
| | 2,6-Diisopropylphenol | | | |
| | 2-tert-Butyl-4-ethylphenol | | | |
| | 6-tert-Butyl-2,4-dimethylphenol | | | |
| | (2-tert-Butyl-4,6-dimethylphenol) | | | |
| | 4-n-Heptylphenol | | | |
| | 4-tert-Octylphenol | | | |
| | 2,6-Di-tert-butylphenol | | | |
| | 4-n-Octylphenol | | | |
| | 2,4-Di-sec-butylphenol | | | |
| | 2,6-Di-tert-butyl-4-methylphenol | | | |
| | 4-n-Nonylphenol | | | |
| | 4,6-Di-tert-butyl-2-methylphenol | | | |
| | 2-Methyl-4-tert-octylphenol | | | |
| REPHE01002 | 4-Chloroguaiacol | each at 100µg/ml | Methanol | 1.1 ml |
| | 3,4-Dichloroguaiacol | | | |
| | 4,5-Dichloroguaiacol | | | |
| | 4,6-Dichloroguaiacol | | | |
| | 3,4,5-Trichloroguaiacol | | | |
| | 3,4,6-Trichloroguaiacol | | | |
| | 4,5,6-Trichloroguaiacol | | | |
| | Tetrachloroguaiacol | | | |
| REPHE01003 | 4-Chlorocatechol | each at 100µg/ml | Methanol | 1.1 ml |
| | 3,4-Dichlorocatechol | | | |
| | 3,6-Dichlorocatechol | | | |
| | 4,5-Dichlorocatechol | | | |
| | 3,4,5-Trichlorocatechol | | | |
| | 3,4,6-Trichlorocatechol | | | |
| | Tetrachlorocatechol | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPHE01004 | 5-Chlorovanillin | each at 100µg/ml | Acetone | 1.1 ml |
| | 6-Chlorovanillin | | | |
| | 5,6-Dichlorovanillin | | | |
| | 2-Chlorosyringaldehyde | | | |
| | Trichlorosyringol | | | |
| | 2,6-Dichlorosyringaldehyde | | | |
| REPHE01005 | 4-Chloro-3-methylphenol | each at 500µg/ml | Methanol | 1.1 ml |
| | 2-Chlorophenol | | | |
| | 2,4-Dichlorophenol | | | |
| | 2,4-Dimethylphenol | | | |
| | 2,4-Dinitrophenol | | | |
| | 2-Methyl-4,6-dinitrophenol | | | |
| | 2-Nitrophenol | | | |
| | 4-Nitrophenol | | | |
| | Pentachlorophenol | | | |
| | Phenol | | | |
| | 2,4,6-Trichlorophenol | | | |
| REPHE01006 | 2-Methylphenol (o-Cresol) | 65000mg/l | Acetone | 1.1 ml |
| | 4-Methylphenol (p-Cresol) | 6500mg/l | | |
| | 3,5-Dimethylphenol | 6500mg/l | | |
| | 2,4,6-Trimethylphenol | 2200mg/l | | |
| | 4-tert-Butylphenol | 1100mg/l | | |
| | 4-tert-Butyl-2-methylphenol | 270mg/l | | |
| | 4-n-Pentylphenol | 540mg/l | | |
| | 4-n-Hexylphenol | 160mg/l | | |
| | 4-n-Heptylphenol | 80mg/l | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPHE01007 | Phenol | each at 100µg/ml | Methanol | 1ml |
| | 2-Methylphenol (o-Cresol) | | | |
| | 3-Methylphenol (m-Cresol) | | | |
| | 4-Methylphenol (p-Cresol) | | | |
| | 2,4-Dimethylphenol | | | |
| | 4-Ethylphenol | | | |
| | 2,6-Di-tert-butyl-4-methylphenol | | | |
| | (2,6-Bis(1,1-dimethylethyl)-4-methylphenol) | | | |
| | 2-Phenylphenol | | | |
| | 2-Benzylphenol | | | |
| | 2-Benzyl-4-methylphenol | | | |
| | 2-Chorophenol | | | |
| | 3-Chlorophenol | | | |
| | 4-Chlorophenol | | | |
| | 4-Chloro-2-methylphenol | | | |
| | 4-Chloro-3-methylphenol | | | |
| | 2,4-Dichloro-3,5-dimethylphenol | | | |
| | 2-Cyclopentyl-4-chlorophenol | | | |
| | 6-Chloro-5-methyl-2- | | | |
| | (1-methylethyl)phenol(6-Chorothymol) | | | |
| | 2,3-Dichlorophenol | | | |
| | 2,4-Dichlorophenol | | | |
| | 2,5-Dichlorophenol | | | |
| | 2,6-Dichlorophenol | | | |
| | 2,4,6-Trichlorophenol | | | |
| | 2,3,5-Trichlorophenol | | | |
| | 2,4,5-Trichlorophenol | | | |
| | 2,3,6-Trichlorophenol | | | |
| | 2,3,4,5-Tetrachlorophenol | | | |
| | 2,3,4,6-Tetrachlorophenol | | | |
| | 2,3,5,6-Tetrachlorophenol | | | |
| | Pentachlorophenol | | | |
| | 1-Naphthol | | | |
| | 2-Naphthol | | | |
| | 2-Chloro-5-methylphenol | | | |
| | (6-Chloro-3-methylphenol) | | | |
| | 2-Chloro-4-tert-butylphenol | | | |
| | 4-Chloro-2-benzylphenol | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPHE01008 | Phenol | each at 300µg/ml | Methanol | 1.1 ml |
| | 2-Methylphenol (o-Cresol) | | | |
| | 3-Methylphenol (m-Cresol) | | | |
| | 4-Methylphenol (p-Cresol) | | | |
| | 2,4-Dimethylphenol | | | |
| | 4-Ethylphenol | | | |
| | 2,6-Bis(1,1-dimethylethyl)-4-methylphenol | | | |
| | 2-Phenylphenol | | | |
| | 2-Benzylphenol | | | |
| | 2-Benzyl-4-methylphenol | | | |
| | 2-Chorophenol | | | |
| | 3-Chlorophenol | | | |
| | 4-Chlorophenol | | | |
| | 4-Chloro-2-methylphenol | | | |
| | 4-Chloro-3-methylphenol | | | |
| | 2-Chloro-5-methylphenol | | | |
| | (6-Chloro-3-methylphenol) | | | |
| | 2,4-Dichloro-3,5-dimethylphenol | | | |
| | 2-Chloro-4-tert-butylphenol | | | |
| | 2-Cyclopentyl-4-chorophenol | | | |
| | 4-Chloro-2-benzylphenol | | | |
| | 6-Chloro-5-methyl-2-(1-methylethyl)phenol | | | |
| | 2,3-Dichlorophenol | | | |
| | 2,4-Dichlorophenol | | | |
| | 2,5-Dichlorophenol | | | |
| | 2,6-Dichlorophenol | | | |
| | 2,4,6-Trichlorophenol | | | |
| | 2,3,5-Trichlorophenol | | | |
| | 2,4,5-Trichlorophenol | | | |
| | 2,3,6-Trichlorophenol | | | |
| | 2,3,4,5-Tetrachlorophenol | | | |
| | 2,3,4,6-Tetrachlorophenol | | | |
| | 2,3,5,6-Tetrachlorophenol | | | |
| | Pentachlorophenol | | | |
| REPHE01009 | 4-n-Hexylphenol | each at 100µg/ml | Isooctane | 5ml |
| | 2,4-Di-tert-butylphenol | | | |
| | 2,6-Di-tert-butylphenol | | | |
| REPHE01010 | Phenol | 5000µg/ml | Isooctane | 5ml |
| | m-Cresol | 2000µg/ml | | |
| | 4-Ethylphenol | 200µg/ml | | |
| | 2,4-Dimethylphenol | 200µg/ml | | |
| | 2,3,6-Trimethylphenol | 200µg/ml | | |
| | 4-n-Propylphenol | 200µg/ml | | |
| | 4-sec-Butylphenol | 200µg/ml | | |
| | 4-n-Butylphenol | 200µg/ml | | |
| | 2-tert-Butyl-4-methylphenol | 200µg/ml | | |
| | 4-n-Pentylphenol | 200µg/ml | | |
| | 4-n-Hexylphenol | 200µg/ml | | |
| | 2-tert-Butyl-4-ethylphenol | 200µg/ml | | |
| | 2-Cyclohexyl-5-methylphenol | 200µg/ml | | |
| | 4-n-Heptylphenol | 200µg/ml | | |
| | 4-n-Octylphenol | 200µg/ml | | |
| | Di-sec-butylphenol, mixture of isomers | 200µg/ml | | |
| | 4-n-Nonylphenol | 200µg/ml | | |
| | 2,6-Di-tert-butyl-4-methylphenol | 200µg/ml | | |


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| Product No. | Description | Concentration | Solvent | Pack Size |
|---|---|---|---|---|
| REPHE01011 | Acenaphthene | each at 100µg/ml | Toluene | 1.1 ml |
| | Acenaphthylene | | | |
| | Acetophenone | | | |
| | Aniline | | | |
| | Anthracene | | | |
| | Benzoic acid | | | |
| | Benz[a]anthracene | | | |
| | Benzo[b]fluoranthene | | | |
| | Benzo[k]fluoranthene | | | |
| | Benzo[ghi]perylene | | | |
| | Benzo[a]pyrene | | | |
| | p-Benzoquinone | | | |
| | Benzyl alcohol | | | |
| | Chrysene | | | |
| | Dibenz[a]acridine | | | |
| | Dibenz[a,h]anthracene | | | |
| | Dibenzofuran | | | |
| | Dibenzo[a,e]pyrene | | | |
| | 7,12-Dimethylbenz[a]anthracene | | | |
| | 2,4-Dimethylphenol | | | |
| | Fluoranthene | | | |
| | Fluorene | | | |
| | Hydroquinone | | | |
| | Indeno[1,2,3-cd]pyrene | | | |
| | Isophorone | | | |
| | 3-Methylcholanthrene | | | |
| | 2-Methylnaphthalene | | | |
| | 2-Methylphenol | | | |
| | 3-Methylphenol | | | |
| | 4-Methylphenol | | | |
| | Naphthalene | | | |
| | Perylene | | | |
| | Phenanthrene | | | |
| | Phenol | | | |
| | 2-Picoline | | | |
| | Pyrene | | | |
| | Pyridine | | | |
| | Resorcinol | | | |
| REPHE01012 | Phenol | each at 50µg/ml | Methanol | 1.1 ml |
| | Catechol | | | |
| | Resorcinol | | | |
| | o-Cresol | | | |
| | m-Cresol | | | |
| | p-Cresol | | | |
| | 2,3-Dimethylphenol | | | |
| | 2,4-Dimethylphenol | | | |
| | 2,5-Dimethylphenol | | | |
| | 2,6-Dimethylphenol | | | |
| | 3,4-Dimethylphenol | | | |
| | 3,5-Dimethylphenol | | | |
| | 2,3,5-Trimethylphenol | | | |
| | 2-Isopropylphenol | | | |
| | 1-Naphthol | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPHE01013 | 4-Nonylphenol (mix of isomers) | 350ng/ml | Acetone | 1ml |
| | 4-tert-Octylphenol | 300ng/ml | | |
| REPHE01014 | 4-Chloro-3,5-dimethylphenol | each at 2000µg/ml | Methanol | 1ml |
| | 4-n-Nonylphenol | | | |
| | 4-n-Octylphenol | | | |
| | 4-tert-Octylphenol | | | |
| | Bisphenol A | | | |
| | 2-Isopropylphenol | | | |
| | 2,3,5-Trimethylphenol | | | |
| REPHE01015 | 4-Nonylphenol (mix of isomers) | 0.1mg/ml | Isooctane | 1ml |
| | 4-Nonylphenol monoethoxylate (mix of isomers | 0.1mg/ml | | |
| | 4-Nonylphenol diethoxylate (mix of isomers) | 0.1mg/ml | | |
| | 4-Nonylphenol triethoxylate (mix of isomers) | 0.1mg/ml | | |
| | 4-n-Octylphenol | 0.02mg/ml | | |
| | 4-tert-Octylphenol | 0.02mg/ml | | |
| | 4-tert-Octylphenol monoethoxylate | 0.02mg/ml | | |
| | 4-tert-Octylphenol diethoxylate | 0.02mg/ml | | |
| | 4-tert-Octylphenol triethoxylate | 0.02mg/ml | | |
| | 4-n-Nonylphenol | 0.02mg/ml | | |
| | Bisphenol A | 0.02mg/ml | | |
| REPHE01016 | 4-(1-Ethyl-1-methylpropyl)-2-methylphenol | each at 100µg/ml | Isooctane | 1ml |
| | 4-n-Hexylphenol | | | |
| | 2,4-Di-tertbutyllphenol | | | |
| REPHE01017 | Phenol (C0-phenol) | each at 100µg/ml | Isooctane | 1ml |
| | 2-methylphenol (o-Cresol) | | | |
| | 4-methylphenol (p-Cresol) | | | |
| | 4-ethylphenol | | | |
| | 2,4-dimethylphenol | | | |
| | 3,5-dimethylphenol | | | |
| | 4-n-propylphenol | | | |
| | 2,4,6-trimethylphenol | | | |
| | 2,3,5-trimethylphenol | | | |
| REPHE09001-I | Phenol-2,3,4,5,6-d5 | each at 100µg/ml | Toluene | 1.1 ml |
| | p-Cresol-d8 | | | |
| | 4-Ethylphenol-d10 | | | |
| | 4-tert-Butyl-d9-phenol-2,3,5,6-d4 | | | |
| | 2,6-Di-(tert-butyl-d9)-4-methylphenol-3,5-d2, | | | |
| REPHE09002-I | Phenol-2,3,4,5,6-d5 | each at 100µg/ml | Toluene | 1.1 ml |
| | p-Cresol-d8 | | | |
| | 4-Ethylphenol-d10 | | | |
| | 4-tert-Butyl-d9-phenol-2,3,5,6-d4 | | | |
| | 2,6-Di-(tert-butyl-d9)-4-methylphenol-3,5-d2, | | | |
| | 4-n-Octylphenol-d17 | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| REPHE09003-I | Phenol-2,3,4,5,6-d5 | each at 1000µg/ml | Toluene | 1.1 ml |
| | p-Cresol-d8 | | | |
| | 4-Ethylphenol-d10 | | | |
| | 4-tert-Butyl-d9-phenol-2,3,5,6-d4 | | | |
| | 2,6-Di-(tert-butyl-d9)-4-methylphenol-3,5-d2 | | | |
| | 4-n-Octylphenol-d17 | | | |
| REPHE09004-I | 4-n-Nonylphenol (ring 13C6) | each at 1mg/ml | Acetone | 10 ml |
| | 4-n-Nonylphenol monoethoxylate (ring 13C6) | | | |
| | 4-n-Nonylphenol diethoxylate (ring 13C6) | | | |
| | Bisphenol A (d16) | | | |
| REPHE09005-I | 4-tert-Octylphenol | 1µg/ml | Acetone | 10 ml |
| | 4-tert-Octylphenol monoethoxylate | 1µg/ml | | |
| | 4-tert-Octylphenol diethoxylate | 1µg/ml | | |
| | 4-tert-Octylphenol triethoxylate | 1µg/ml | | |
| | 4-tert-Octylphenol nonaethoxylate | 1µg/ml | | |
| | iso-Nonylphenyl, techn. | 5µg/ml | | |
| | iso-Nonylphenyl monoethoxylate | 5µg/ml | | |
| | iso-Nonylphenyl diethoxylate | 5µg/ml | | |
| | iso-Nonylphenyl triethoxylate | 5µg/ml | | |
| | iso-Nonylphenyl tetraethoxylate | 5µg/ml | | |
| | Bisphenol A (d16) | 1µg/ml | | |
| REPHE09006-I | Phenol-d6 | each at 1000µg/ml | Isopropanol | 1ml |
| | o-Cresol-d8 | | | |
| | 2,4-Dimethylphenol-d3 | | | |
| | 4-Chloro-3-methylphenol | | | |
| REPHE09007-I | C4: | | Toluene | 5ml |
| | 4-n-Butyphenol-d4 | 100µg/ml | | |
| | 4-tert-Butylphenol-d9-2,3,5,6-d4 | 100µg/ml | | |
| | C7-9: | | | |
| | 4-n-Nonylphenol-d4 | 100µg/ml | | |
| | 2.6-Ditertbutyl-d9-4-methylphenol-d2 | 100µg/ml | | |
| | Phenol-2,3,4,5,6-d5 | 1500µg/ml | | |
| | p-Cresol-d8 | 1008µg/ml | | |
| | 2,4-Dimethylphenol-3,5,6-d3 | 745µg/ml | | |
| | n-Propylphenol-d12 | 516µg/ml | | |


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## 4-n-Octylphenol ethoxylates

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPHX1101 | 4-n-Octylphenol | 1000µg/mL in isooctane | 1ml |
| REPHX1102 | Ethylene glycol mono(p-n-octylphenyl) ether | 1000µg/mL in isooctane | 1ml |
| REPHX1103 | Diethylene glycol mono(p-n-octylphenyl) ether | 1000µg/mL in isooctane | 1ml |
| REPHX1104 | Triethylene glycol mono(p-n-octylphenyl) ether | 1000µg/mL in isooctane | 1ml |
| REPHX1105 | Tetraethylene glycol mono(p-n-octylphenyl) ether | 1000µg/mL in isooctane | 1ml |
| REPHX1106 | Pentaethylene glycol mono(p-n-octylphenyl) ether | 1000µg/mL in isooctane | 1ml |
| REPHX1107 | Hexaethylene glycol mono(p-n-octylphenyl) ether | 1000µg/mL in isooctane | 1ml |

## 4-tert-Octylphenol ethoxylates

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPHX1201 | 4-tert-Octylphenol | 1000µg/mL in isooctane | 1ml |
| REPHX1202 | 4-tert-Octylphenol 5EO | 1000µg/mL in isooctane | 1ml |
| REPHX1203 | 4-tert-Octylphenol 6EO | 1000µg/mL in isooctane | 1ml |
| REPHX1204 | 4-tert-Octylphenol 9EO | 100µg/mL in isooctane | 1ml |

## Nonylphenol ethoxylates (nonylisomer mixtures)

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPHX1301 | 4-Nonylphenol, mixture of nonyl isomers | 1000µg/mL in isooctane | 1ml |
| REPHX1302 | Ethylene glycol mono(p-nonylphenyl) ether, mixture | 1000µg/mL in isooctane | 1ml |
| REPHX1303 | Diethylene glycol mono(p-nonylphenyl) ether, mixtu | 1000µg/mL in isooctane | 1ml |
| REPHX1304 | Triethylene glycol mono(p-nonylphenyl) ether isome | 1000µg/mL in Isooctane | 1ml |
| REPHX1305 | Tetraethylene glycol mono(p-nonylphenyl) ether iso | 1000µg/mL in Isooctane | 1ml |
| REPHX1306 | Pentaethylene glycol mono(p-nonylphenyl) ether isc | 1000µg/mL in Isooctane | 1ml |
| REPHX1307 | Hexaethylene glycol mono(p-nonylphenyl) ether iso | 1000µg/mL in Isooctane | 1ml |

## 4-n-Nonylphenol ethoxylates

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| REPHX1401 | 4-n-Nonylphenol | 1000µg/mL in isooctane | 1ml |
| REPHX1402 | Ethylene glycol mono(p-n-nonylphenyl) ether | 1000µg/mL in Isooctane | 1ml |
| REPHX1403 | Diethylene glycol mono(p-n-nonylphenyl) ether | 1000µg/mL in Isooctane | 1ml |
| REPHX1405 | Hexaethylene glycol mono(p-n-nonylphenyl) ether | 1000µg/mL in Isooctane | 1ml |
| REPHX1406 | 2-(4-Nonylphenoxy)acetic acid isomer mixture | 1000µg/mL in Isooctane | 1ml |


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## Tin chlorides and tetraalkyl tin and tetraphenyl tin (common pollutants)

| Product No | Description | Concentration | Pack Size |
|---|---|---|---|
| RETIN1001 | Methyltin trichloride | Neat | 100mg |
| RETIN1002 | Di-n-propyltin dichloride | Neat | 100mg |
| RETIN1003 | Di-n-butyltin dichloride | 1000µg/mL in methanol | 5ml |
| RETIN1005 | Tetra-n-butyltin | 1000µg/mL in methanol | 1ml |
| RETIN1006 | Mono-n-octyltin trichloride | 1000µg/mL in methanol | 1ml |
| RETIN1007 | Di-n-octyltin dichloride | 1000µg/mL in methanol | 1ml |
| RETIN1008 | Tri-n-octyltin chloride | 1000µg/mL in methanol | 5ml |
| RETIN1009 | Monophenyltin trichloride | 1000µg/mL in methanol | 5ml |
| RETIN1010 | Diphenyltin dichloride | 1000µg/mL in methanol | 5ml |
| RETIN1012 | Methyltriphenyltin | 1000µg/mL in isooctane | 1.1ml |
| RETIN1013 | Tricyclohexyltin chloride | 500µg/mL in methanol | 1ml |
| RETIN1014 | Tri-n-propyltin chloride | 1000µg/mL in methanol | 1ml |
| RETIN1015 | Tri-n-pentyltin chloride | 1000µg/mL in methanol | 1ml |
| RETIN1016 | Tetra-n-propyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1017 | Tetra-n-pentyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1018 | Mono-n-heptyltin trichloride | 1000µg/mL in methanol | 1ml |
| RETIN1019 | Di-n-heptyltin dichloride | 1000µg/mL in methanol | 1ml |

## Deuterated Internal Standard

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| RETIN9001-I | Tetra-n-propyltin-d7 (mono-n-propyl-d7) | 1000µg/mL in isooctane | 1ml |
| RETIN9002-I | Mono-n-butyltin-d9 trichloride | 1000µg/mL in methanol | 1ml |
| RETIN9003-I | Tri-n-butyltin-d27 chloride | 1000µg/mL in methanol | 1ml |
| RETIN9004-I | Monophenyltin-d5 trichloride | 1000µg/mL in methanol | 1ml |
| RETIN9005-I | Triphenyltin-d15 chloride | 100µg/mL in methanol | 1ml |

## Analytes ethyl derivatives

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| RETIN1101 | Mono-n-butyltriethyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1102 | Di-n-butyldiethyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1103 | Ethyltri-n-butyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1104 | Mono-n-octyltriethyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1105 | Di-n-octyldiethyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1106 | Ethyltri-n-octyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1107 | Ethyltricyclohexyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1108 | Monophenyltriethyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1109 | Diphenyldiethyltin | 1000µg/mL in isooctane | 1ml |
| RETIN1110 | Ethyltriphenyltin | 1000µg/mL in isooctane | 1ml |

## Internal standards ethyl derivatives

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| RETIN9101-I | Ethyltri-n-propyltin | 1000µg/mL in Isooctane | 1ml |
| RETIN9102-I | Ethyltri-n-pentyltin | 1000µg/mL in isooctane | 1ml |
| RETIN9103-I | Mono-n-heptyltriethyltin | 1000µg/mL in isooctane | 1ml |
| RETIN9104-I | Di-n-heptyldiethyltin | 1000µg/mL in isooctane | 1ml |


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## Deuterated internal standards ethyl derivatives

| Product No. | Description | Concentration | Pack Size |
|---|---|---|---|
| RETIN9201-I | Mono-n-butyltriethyltin-d9 (mono-n-butyl-d9) | 100µg/mL in isooctane | 1ml |
| RETIN9202-I | Ethyltri-n-butyltin-d27 (tri-n-butyl-d27) | 100µg/mL in isooctane | 1ml |
| RETIN9203-I | Monophenyltriethyltin-d5 (phenyl-d5) | 100µg/mL in isooctane | 1ml |
| RETIN9204-I | Ethyltriphenyltin-d15 (triphenyl-d15) | 100µg/mL in isooctane | 1ml |
| RETIN9205-I | Epichlorohydrin-d5 | 100µg/mL in methanol | 1ml |
| RETIN9206-I | Epichlorohydrin-d5 | Neat | 10mg |

## Tin-Organics Multi-Elements

| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| RETIN01001 | Mono-n-butyltin trichloride | each at 1000µg/ml | Methanol | 1.1 ml |
| | Di-n-butyltin dichloride | | | |
| | Mono phenyltin trichloride | | | |
| | Tri-n-butyltin chloride | | | |
| | Triphenyltin chloride | | | |
| | Diphenyltin dichloride | | | |
| RETIN01002 | Mono-n-butyltin trichloride | each at 1000µg/ml | Methanol | 1.1 ml |
| | Di-n-butyltin dichloride | | | |
| | Tri-n-butyltin chloride | | | |
| | Tetra-n-butyltin | | | |
| | Mono-n-octyltin trichloride | | | |
| | Di-n-octyltin dichloride | | | |
| | Triphenyltin chloride | | | |
| | Tricyclohexyltin chloride | | | |
| RETIN01003 | Di-n-heptyltin dichloride | each at 1000µg/ml | Methanol | 1.1 ml |
| | Mono-n-heptyltin trichloride | | | |
| | Tri-n-propyltin chloride | | | |
| | Tetra-n-propyltin | | | |
| RETIN01004 | Mono-n-butyltin trichloride | each at 1000µg/ml | Methanol | 1.1 ml |
| | Di-n-butyltin dichloride | | | |
| | Tri-n-butyltin chloride | | | |
| | Monophenyltin trichloride | | | |
| | Diphenyltin dichloride | | | |
| | Triphenyltin chloride | | | |
| | Mono-n-octyltin trichloride | | | |
| | Di-n-octyltin dichloride | | | |
| | Tri-n-octyltin chloride | | | |
| | Tricyclohexyltin chloride | | | |
| | Tetra-n-butyltin | | | |
| RETIN01005 | Mono-n-butyltin trichloride | each at 1000µg/ml | Methanol | 1.1 ml |
| | Di-n-butyltin dichloride | | | |
| | Tri-n-butyltin chloride | | | |
| | Monophenyltin trichloride | | | |
| | Diphenyltin dichloride | | | |
| | Triphenyltin chloride | | | |
| | Mono-n-octyltin trichloride | | | |
| | Di-n-octyltin dichloride | | | |
| | Tri-n-octyltin chloride | | | |
| | Tricyclohexyltin chloride | | | |
| | Tetra-n-butyltin | | | |


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| Product No. | Description | Concentration | Solvent | Pack size |
|---|---|---|---|---|
| RETIN01005 | Mono-n-butyl triethyltin | each at 1000µg/ml | isooctane | 1.1 ml |
| | Dibutyl diethyltin | | | |
| | Ethyltributyltin | | | |
| | Monophenyl triethyltin | | | |
| | Diphenyl diethyltin | | | |
| | Ethyltriphenyltin | | | |
| | Mono-n-octyltriethyltin | | | |
| | Di-n-octyl diethyltin | | | |
| | Ethyltricyclohexyltin | | | |
| | Tetra-n-butyltin | | | |
| RETIN01006 | Ethyltripropyltin | each at 1000µg/ml | isooctane | 1.1 ml |
| | Di-n-heptyl diethyltin | | | |
| | Tetra-n-propyltin | | | |
| RETIN01007 | Monobutyltin (triethyl) | each at 1000µg/ml | isooctane | 1ml |
| | Dibutyltin (diethyl) | | | |
| | Tributyltin (monoethyl) | | | |
| | Monophenyltin (triethyl) | | | |
| | Diphenyltin (diethyl) | | | |
| | Triphenyltin (monoethyl) | | | |
| | Monooctyltin (triethyl) | | | |
| | Dioctyltin (diethyl) | | | |
| | Tripropyltil (monoethyl) | | | |
| RETIN01008 | Mono-n-butyltriethyl tin | each at 100µg/ml | isooctane | 1ml |
| | Di-n-butyldiethyl tin | | | |
| | Tri-n-butyletyl tin | | | |
| RETIN01009 | Mono-n-butyl triethyltin | each at 1000µg/ml | isooctane | 1ml |
| | Dibutyl diethyltin | | | |
| | Ethyltributyltin | | | |
| | Monophenyl triethyltin | | | |
| | Diphenyl diethyltin | | | |
| | Ethyltriphenyltin | | | |
| | Mono-n-octyltriethyltin | | | |
| | Di-n-octyl diethyltin | | | |
| | Ethyltintricyclohexyltin | | | |
| | Tetra-n-butyltin | | | |
| | Ethyltripropyltin | | | |
| | Di-n-heptyl diethyltin | | | |
| | Tetra-n-propyltin | | | |


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