



# EPA METHOD 8270

For the analysis of semi-volatiles  
in solid waste and wastewater

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LGC Quality | ISO 9001 | ISO/IEC 17025 | ISO Guide 34 |

# WE'RE MEETING EPA METHOD 8270 STANDARDS

For semi-volatiles in solid  
waste and wastewater

**Dr. Ehrenstorfer offers the full range of easy-to-use mixes to test semi-volatiles in solid waste and wastewater in accordance with EPA Method 8270.**

Designed for convenience, precision and accuracy, the product group features Dr. Ehrenstorfer's new 76 component all-in-one 8270 UltiMix for instrument calibration. Reactive analytes have been removed from the mix and are offered separately to make calibration and analysis easier. The mixtures in this group are manufactured in accordance with ISO Guide 34 requirements and are part of our Dr. Ehrenstorfer product line which offers thousands of reference standards for residue analysis.

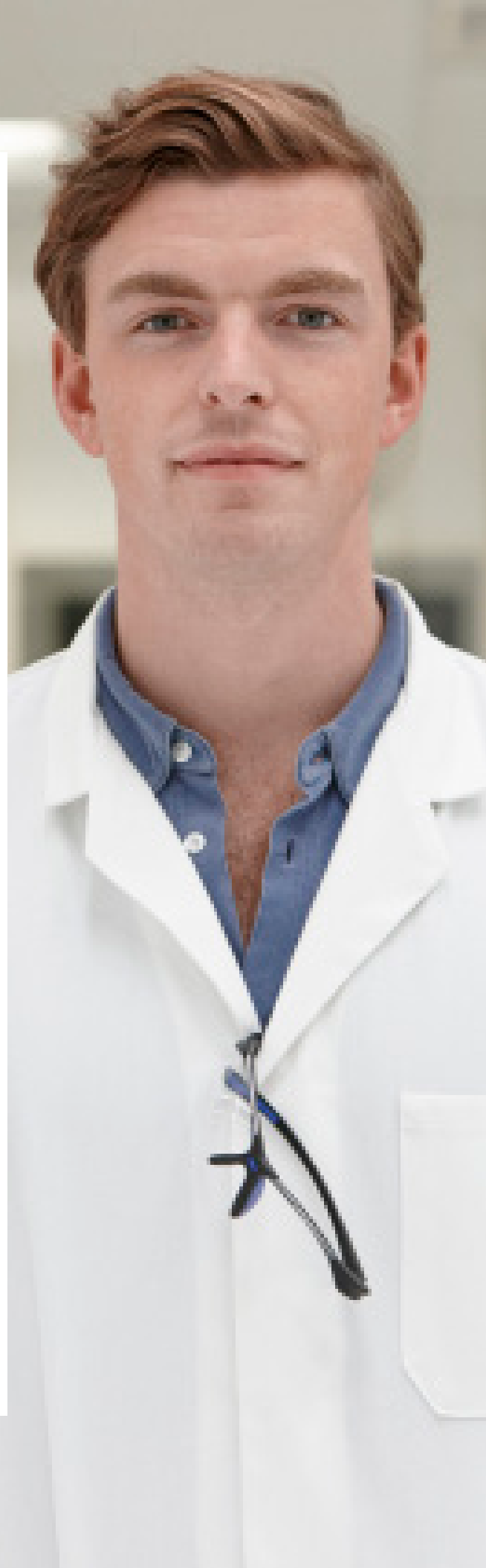
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Please let us know if you have questions or would like to discuss your specific requirements.

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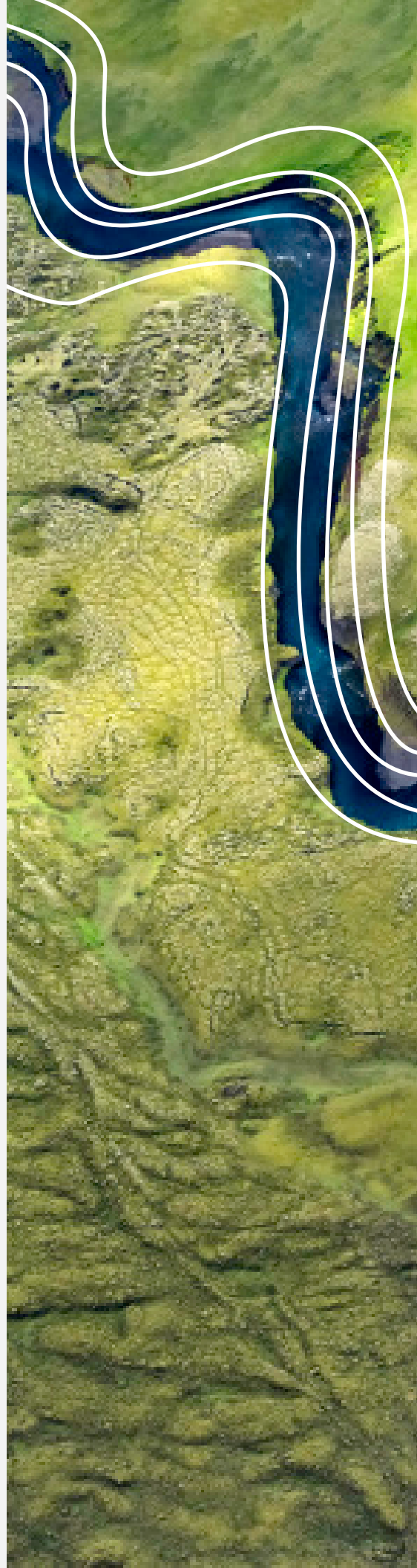
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## Calibration mixes

| UltiMix 8270 Calibration Mix (76 components)   |           | Product Number                   | Size     |
|--|-----------|----------------------------------|----------|
| Reactive analytes offered separately<br>500/1000 µg/mL in Methylene Chloride/Benzene 1:1<br>3-methylphenol and 4-methylphenol are 500 µg/mL each |           | DRE-GA09000419BD                 | 1 mL     |
| acenaphthene   | 83-32-9   | 2,6-dinitrotoluene               | 606-20-2 |
| acenaphthylene   | 208-96-8  | di-n-octyl phthalate             | 117-84-0 |
| aniline  | 62-53-3   | diphenylamine                    | 122-39-4 |
| anthracene   | 120-12-7  | fluoranthene                     | 206-44-0 |
| azobenzene   | 103-33-3  | fluorene                         | 86-73-7  |
| benzo[a]anthracene   | 56-55-3   | hexachlorobenzene                | 118-74-1 |
| benzo[b]fluoranthene   | 205-99-2  | hexachlorobutadiene              | 87-68-3  |
| benzo[k]fluoranthene   | 207-08-9  | hexachlorocyclopentadiene        | 77-47-4  |
| benzo[ghi]perylene   | 191-24-2  | hexachloroethane                 | 67-72-1  |
| benzo[a]pyrene   | 50-32-8   | indeno[1,2,3-cd]pyrene           | 193-39-5 |
| benzyl alcohol   | 100-51-6  | isophorone                       | 78-59-1  |
| bis(2-chloroethoxy)methane   | 111-91-1  | 2-methyl-4,6-dinitrophenol (wet) | 534-52-1 |
| bis(2-chloroethyl)ether  | 111-44-4  | 1-methylnaphthalene              | 90-12-0  |
| bis(2-chloro-1-methylethyl) ether  | 108-60-1  | 2-methylnaphthalene              | 91-57-6  |
| 4-bromophenyl phenyl ether   | 101-55-3  | 2-methylphenol                   | 95-48-7  |
| butyl benzyl phthalate   | 85-68-7   | 3-methylphenol                   | 108-39-4 |
| carbazole  | 86-74-8   | 4-methylphenol                   | 106-44-5 |
| 4-chloroaniline  | 106-47-8  | naphthalene                      | 91-20-3  |
| 4-chlorodiphenyl ether   | 7005-72-3 | 2-nitroaniline                   | 88-74-4  |
| 4-chloro-3-methylphenol  | 59-50-7   | 3-nitroaniline                   | 99-09-2  |
| 2-chloronaphthalene  | 91-58-7   | 4-nitroaniline                   | 100-01-6 |
| 2-chlorophenol   | 95-57-8   | nitrobenzene                     | 98-95-3  |
| chrysene   | 218-01-9  | 2-nitrophenol                    | 88-75-5  |
| dibenz[a,h]anthracene  | 53-70-3   | 4-nitrophenol                    | 100-02-7 |
| dibenzofuran   | 132-64-9  | N-nitrosodimethylamine           | 62-75-9  |
| di-n-butyl phthalate   | 84-74-2   | N-nitrosodi-n-propylamine        | 621-64-7 |
| 1,2-dichlorobenzene  | 95-50-1   | pentachlorophenol                | 87-86-5  |
| 1,3-dichlorobenzene  | 541-73-1  | phenanthrene                     | 85-01-8  |
| 1,4-dichlorobenzene  | 106-46-7  | phenol                           | 108-95-2 |
| 2,4-dichlorophenol   | 120-83-2  | pyrene                           | 129-00-0 |
| diethyl phthalate  | 84-66-2   | pyridine                         | 110-86-1 |
| 2,4-dimethylphenol   | 105-67-9  | 2,3,4,6-tetrachlorophenol        | 58-90-2  |
| dimethyl phthalate   | 131-11-3  | 2,3,5,6-tetrachlorophenol        | 935-95-5 |
| 1,2-dinitrobenzene   | 528-29-0  | 1,2,4-trichlorobenzene           | 120-82-1 |
| 1,3-dinitrobenzene   | 99-65-0   | 2,4,5-trichlorophenol            | 95-95-4  |
| 1,4-dinitrobenzene   | 100-25-4  | 2,4,6-trichlorophenol            | 88-06-2  |
| 2,4-dinitrophenol  | 51-28-5   | bis(2-ethylhexyl) adipate        | 103-23-1 |
| 2,4-dinitrotoluene   | 121-14-2  | bis(2-ethylhexyl) phthalate      | 117-81-7 |

\*1,2-diphenylhydrazine decomposes to azobenzene in the injector and is not included.

\*N-nitrosodiphenylamine decomposes to diphenylamine in the injector and is not included.

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## Calibration mixes

| Benzidines Mix         |          | Product Number   | Size     |
|------------------------|----------|------------------|----------|
| 2000 µg/mL in Methanol |          | DRE-GA09000426ME | 1 mL     |
|                        |          | DRE-GS09000426ME | 5 x 1 mL |
| benzidine              | 92-87-5  |                  |          |
| 3,3'-dichlorobenzidine | 91-94-1  |                  |          |
| 3,3'-dimethylbenzidine | 119-93-7 |                  |          |

| Organochlorine Mix (21 components) |           | Product Number              | Size       |
|------------------------------------|-----------|-----------------------------|------------|
| 1000 µg/mL in MtBE                 |           | DRE-GA09000427MB            | 1 mL       |
|                                    |           | DRE-GS09000427MB            | 5 x 1 mL   |
| aldrin                             | 309-00-2  | endosulfan II               | 33213-65-9 |
| a-BHC                              | 319-84-6  | endosulfan sulfate          | 1031-07-8  |
| b-BHC                              | 319-85-7  | endrin                      | 72-20-8    |
| d-BHC                              | 319-86-8  | endrin aldehyde             | 7421-93-4  |
| g-BHC                              | 58-89-9   | endrin ketone               | 53494-70-5 |
| cis-chlordane                      | 5103-71-9 | heptachlor                  | 76-44-8    |
| p,p'-DDD                           | 72-54-8   | heptachlor epoxide isomer B | 1024-57-3  |
| p,p'-DDE                           | 72-55-9   | hydroquinone                | 123-31-9   |
| p,p'-DDT                           | 50-29-3   | methoxychlor                | 72-43-5    |
| dieldrin                           | 60-57-1   | trans-chlordane             | 5103-74-2  |
| endosulfan I                       | 959-98-8  |                             |            |

## Calibration mixes by class

| Calibration Mix 1 (22 components) |          | Product Number            | Size     |
|-----------------------------------|----------|---------------------------|----------|
| 2000 µg/mL in Methylene Chloride  |          | DRE-GA09000437DI          | 1 mL     |
| benzoic acid                      | 65-85-0  | 2-methylphenol            | 95-48-7  |
| 4-chloro-3-methylphenol           | 59-50-7  | 3-methylphenol            | 108-39-4 |
| 2-chlorophenol                    | 95-57-8  | 4-methylphenol            | 106-44-5 |
| 2,4-dichlorophenol                | 120-83-2 | 2-nitrophenol             | 88-75-5  |
| 2,6-dichlorophenol                | 87-65-0  | 4-nitrophenol             | 100-02-7 |
| 2,4-dimethylphenol                | 105-67-9 | pentachlorophenol         | 87-86-5  |
| 2,4-dinitrophenol                 | 51-28-5  | phenol                    | 108-95-2 |
| dinoseb                           | 88-85-7  | 2,3,4,6-tetrachlorophenol | 58-90-2  |
| 2-fluorophenol                    | 367-12-4 | 2,4,6-tribromophenol      | 118-79-6 |
| hexachlorophene                   | 70-30-4  | 2,4,5-trichlorophenol     | 95-95-4  |
| 2-methyl-4,6-dinitrophenol        | 534-52-1 | 2,4,6-trichlorophenol     | 88-06-2  |

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## Calibration mixes by class

| Calibration Mix 2 (11 components)  |          | Product Number            | Size        |
|--|----------|---------------------------|-------------|
| <b>Manufactured upon request*</b><br><b>2000 µg/mL in Methylene Chloride</b> |          | <b>DRE-GA09000438DI</b>   | <b>1 mL</b> |
| aniline  | 62-53-3  | 3-nitroaniline            | 99-09-2     |
| benzidine  | 92-87-5  | 4-nitroaniline            | 100-01-6    |
| 4-chloroaniline  | 106-47-8 | N-nitrosodimethylamine    | 62-75-9     |
| 3,3'-dichlorobenzidine   | 91-94-1  | N-nitrosodi-n-propylamine | 621-64-7    |
| diphenylamine  | 122-39-4 | pyridine                  | 110-86-1    |
| 2-nitroaniline   | 88-74-4  |                           |             |

\*Even with our state of the art analyte stabilization, some products have shorter shelf lives and are manufactured upon request.

| Calibration Mix 3 (23 components)       |           | Product Number             | Size        |
|---|-----------|----------------------------|-------------|
| <b>2000 µg/mL in Methylene Chloride</b> |           | <b>DRE-GA09000439DI</b>    | <b>1 mL</b> |
| aramite                                 | 140-57-8  | hexachlorobutadiene        | 87-68-3     |
| bis(2-chloroethoxy) methane             | 111-91-1  | hexachlorocyclopentadiene  | 77-47-4     |
| bis(2-chloroethyl) ether                | 111-44-4  | hexachloroethane           | 67-72-1     |
| bis(2-chloro-1-methylethyl) ether       | 108-60-1  | hexachloropropene          | 1888-71-7   |
| chlorobenzilate                         | 510-15-6  | isodrin                    | 465-73-6    |
| 4-chlorodiphenyl ether                  | 7005-72-3 | kepone                     | 143-50-0    |
| 2-chloronaphthalene                     | 91-58-7   | pentachlorobenzene         | 608-93-5    |
| 1,2-dichlorobenzene                     | 95-50-1   | pentachloronitrobenzene    | 82-68-8     |
| 1,3-dichlorobenzene                     | 541-73-1  | 1,2,4,5-tetrachlorobenzene | 95-94-3     |
| 1,4-dichlorobenzene                     | 106-46-7  | 1,2,4-trichlorobenzene     | 120-82-1    |
| 1,3-dinitrobenzene                      | 99-65-0   | 4-bromophenylpheny ether   | 101-55-3    |
| hexachlorobenzene                       | 118-74-1  |                            |             |

| Calibration Mix 4 (22 components)       |          | Product Number           | Size        |
|---|----------|--------------------------|-------------|
| <b>2000 µg/mL in Methylene Chloride</b> |          | <b>DRE-GA09000440DI</b>  | <b>1 mL</b> |
| acetophenone                            | 98-86-2  | isophorone               | 78-59-1     |
| azobenzene                              | 103-33-3 | isosafrole               | 120-58-1    |
| benzyl alcohol                          | 100-51-6 | methyl methanesulfonate  | 66-27-3     |
| butyl benzyl phthalate                  | 85-68-7  | 1,4-naphthoquinone       | 130-15-4    |
| dibenzofuran                            | 132-64-9 | nitrobenzene             | 98-95-3     |
| di-n-butyl phthalate                    | 84-74-2  | 4-nitroquinoline-1-oxide | 56-57-5     |
| diethyl phthalate                       | 84-66-2  | phenacetin               | 62-44-2     |
| dimethyl phthalate                      | 131-11-3 | safrole                  | 94-59-7     |
| 2,4-dinitrotoluene                      | 121-14-2 | 1,3,5-trinitrobenzene    | 99-35-4     |
| 2,6-dinitrotoluene                      | 606-20-2 | dioctyl phthalate        | 117-81-7    |
| di-n-octyl phthalate                    | 117-84-0 | ethyl methanesulfonate   | 62-50-0     |

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## Calibration mixes by class

| Calibration Mix 5 (19 components)       |          | Product Number          | Size        |
|---|----------|-------------------------|-------------|
| <b>2000 µg/mL in Methylene Chloride</b> |          | <b>DRE-GA09000441DI</b> | <b>1 mL</b> |
| acenaphthene                            | 83-32-9  | fluoranthene            | 206-44-0    |
| acenaphthylene                          | 208-96-8 | fluorene                | 86-73-7     |
| anthracene                              | 120-12-7 | indeno[1,2,3-cd]pyrene  | 193-39-5    |
| benzo[a]anthracene                      | 56-55-3  | 3-methylcholanthrene    | 56-49-5     |
| benzo[b]fluoranthene                    | 205-99-2 | 1-methylnaphthalene     | 90-12-0     |
| benzo[k]fluoranthene                    | 207-08-9 | 2-methylnaphthalene     | 91-57-6     |
| benzo[ghi]perylene                      | 191-24-2 | naphthalene             | 91-20-3     |
| benzo[a]pyrene                          | 50-32-8  | phenanthrene            | 85-01-8     |
| chrysene                                | 218-01-9 | pyrene                  | 129-00-0    |
| dibenz[a,h]anthracene                   | 53-70-3  |                         |             |

| Calibration Mix 6 (10 components)       |           | Product Number                 | Size        |
|---|-----------|--------------------------------|-------------|
| <b>2000 µg/mL in Methylene Chloride</b> |           | <b>DRE-GA09000442DI</b>        | <b>1 mL</b> |
| di-allate (mixture of isomers)          | 2303-16-4 | parathion                      | 56-38-2     |
| dimethoate                              | 60-51-5   | phorate                        | 298-02-2    |
| disulfoton                              | 298-04-4  | propyzamide (pronamide)        | 23950-58-5  |
| famphur                                 | 52-85-7   | thionazine (zinophos)          | 297-97-2    |
| methyl parathion                        | 298-00-0  | O,O,O-triethylphosphorothioate | 126-68-1    |

## Appendix IX Mixes

| EPA Method 8270 Appendix IX Mix 1 with Phentermine (17 components) |          | Product Number            | Size        |
|--|----------|---------------------------|-------------|
| <b>Benzidine and other reactive compounds offered separately</b>   |          |                           |             |
| <b>2000 µg/mL in Methylene Chloride</b>                            |          | <b>DRE-GA09000443DI</b>   | <b>1 mL</b> |
| 2-acetylaminofluorene  | 53-96-3  | N-nitrosodi-n-butylamine  | 924-16-3    |
| 4-aminobiphenyl  | 92-67-1  | N-nitrosomethylethylamine | 10595-95-6  |
| p-(dimethylamino) azobenzene                                       | 60-11-7  | N-nitrosomorpholine       | 59-89-2     |
| phentermine  | 122-09-8 | N-nitrosopiperidine       | 100-75-4    |
| isosafrole   | 120-58-1 | N-nitrosopyrrolidine      | 930-55-2    |
| 1-naphthylamine  | 134-32-7 | p-phenylenediamine        | 106-50-3    |
| 2-naphthylamine  | 91-59-8  | 2-picoline                | 109-06-8    |
| 5-nitro-o-toluidine  | 99-55-8  | o-toluidine               | 95-53-4     |
| n-nitrosodiethylamine  | 55-18-5  |                           |             |

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## Appendix IX Mixes

| EPA Method 8270 Appendix IX Mix 1 minus Phentermine (16 components)                                   |          | Product Number            | Size       |
|---|----------|---------------------------|------------|
| <b>Benzidine and other reactive compounds offered separately<br/>2000 µg/mL in Methylene Chloride</b> |          | DRE-GA09000444DI          | 1 mL       |
|   |          | DRE-GS09000444DI          | 5 x 1 mL   |
| 2-acetylaminofluorene   | 53-96-3  | n-nitrosodi-n-butylamine  | 924-16-3   |
| 4-aminobiphenyl   | 92-67-1  | N-nitrosomethylethylamine | 10595-95-6 |
| p-(dimethylamino) azobenzene  | 60-11-7  | N-nitrosomorpholine       | 59-89-2    |
| isosafrole  | 120-58-1 | N-nitrosopiperidine       | 100-75-4   |
| 1-naphthylamine   | 134-32-7 | N-nitrosopyrrolidine      | 930-55-2   |
| 2-naphthylamine   | 91-59-8  | p-phenylenediamine        | 106-50-3   |
| 5-nitro-o-toluidine   | 99-55-8  | 2-picoline                | 109-06-8   |
| n-nitrosodiethylamine   | 55-18-5  | o-toluidine               | 95-53-4    |

| EPA Method 8270 Appendix IX Mix 2 (31 components)                     |           | Product Number             | Size       |
|---|-----------|----------------------------|------------|
| <b>Manufactured upon request<br/>1000 µg/mL in Methylene Chloride</b> |           | DRE-GA09000445DI           | 1 mL       |
|   |           | DRE-GS09000445DI           | 5 x 1 mL   |
| acetophenone  | 98-86-2   | isodrin                    | 465-73-6   |
| aramite   | 140-57-8  | isosafrole                 | 120-58-1   |
| benzaldehyde  | 100-52-7  | kepone                     | 143-50-0   |
| biphenyl  | 92-52-4   | 3-methylcholanthrene       | 56-49-5    |
| caprolactam   | 105-60-2  | methyl methanesulfonate    | 66-27-3    |
| chlorobenzilate   | 510-15-6  | 1,4-naphthoquinone         | 130-15-4   |
| 1-chloronaphthalene   | 90-13-1   | 4-nitroquinoline-1-oxide   | 56-57-5    |
| di-allate (mixture of isomers)  | 2303-16-4 | pentachlorobenzene         | 608-93-5   |
| dibenz(a,j) acridine  | 224-42-0  | pentachloroethane          | 76-01-7    |
| 2,6-dichlorophenol  | 87-65-0   | pentachloronitrobenzene    | 82-68-8    |
| 7,12-dimethylbenz[a]anthracene  | 57-97-6   | phenacetin                 | 62-44-2    |
| 1,4-dioxane   | 123-91-1  | propyzamide (pronamide)    | 23950-58-5 |
| diphenyl ether  | 101-84-8  | safrole                    | 94-59-7    |
| ethyl methacrylate  | 97-63-2   | 1,2,4,5-tetrachlorobenzene | 95-94-3    |
| ethyl methanesulfonate  | 62-50-0   | 1,3,5-trinitrobenzene      | 99-35-4    |
| hexachloropropene   | 1888-71-7 |                            |            |

| EPA Method 8270 Appendix IX Organophosphate Mix (9 components) |          | Product Number                 | Size      |
|--|----------|--------------------------------|-----------|
| <b>2000 µg/mL in Methylene Chloride</b>                        |          | DRE-GA09000364DI               | 1 mL      |
| dimethoate   | 60-51-5  | phorate                        | 298-02-2  |
| disulfoton   | 298-04-4 | thionazine (zinophos)          | 297-97-2  |
| famphur  | 52-85-7  | O,O,O-triethylphosphorothioate | 126-68-1  |
| methyl parathion   | 298-00-0 | tetraethyldithio pyrophosphate | 3689-24-5 |
| parathion  | 56-38-2  |                                |           |

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| Aramite Solution     |          | Product Number   | Size |
|----------------------|----------|------------------|------|
| 2000 µg/mL in Hexane | 140-57-8 | DRE-GA09010391HE | 1 mL |

| Methapyrilene Solution           |         | Product Number   | Size     |
|----------------------------------|---------|------------------|----------|
| 2000 µg/mL in Methylene Chloride | 91-80-5 | DRE-GA09010392DI | 1 mL     |
|                                  |         | DRE-GS09010392DI | 5 x 1 mL |

## Quality control products

| EPA Method 8270 UltiMix Matrix Spike Mix (76 components)   |           | Product Number                   | Size     |
|--|-----------|----------------------------------|----------|
| 3-methylphenol and 4-methylphenol are 100 µg/mL each<br>100/200 µg/mL in Methanol/Methylene Chloride 80:20 |           | DRE-GA09000420MD                 | 5 mL     |
|  |           | DRE-GA09000421MD                 | 2 x 5 mL |
| acenaphthene   | 83-32-9   | 2,6-dinitrotoluene               | 606-20-2 |
| acenaphthylene   | 208-96-8  | di-n-octyl phthalate             | 117-84-0 |
| aniline  | 62-53-3   | diphenylamine                    | 122-39-4 |
| anthracene   | 120-12-7  | 2,3,5,6-tetrachlorophenol        | 935-95-5 |
| azobenzene   | 103-33-3  | fluoranthene                     | 206-44-0 |
| benzo[a]anthracene   | 56-55-3   | fluorene                         | 86-73-7  |
| benzo[b]fluoranthene   | 205-99-2  | hexachlorobenzene                | 118-74-1 |
| benzo[k]fluoranthene   | 207-08-9  | hexachlorobutadiene              | 87-68-3  |
| benzo[ghi]perylene   | 191-24-2  | hexachlorocyclopentadiene        | 77-47-4  |
| benzo[a]pyrene   | 50-32-8   | hexachloroethane                 | 67-72-1  |
| benzyl alcohol   | 100-51-6  | indeno[1,2,3-cd]pyrene           | 193-39-5 |
| bis(2-chloroethoxy) methane  | 111-91-1  | isophorone                       | 78-59-1  |
| bis(2-chloroethyl) ether   | 111-44-4  | 2-methyl-4,6-dinitrophenol (wet) | 534-52-1 |
| bis(2-chloro-1-methylethyl) ether  | 108-60-1  | 1-methylnaphthalene              | 90-12-0  |
| 4-bromophenyl phenyl ether   | 101-55-3  | 2-methylnaphthalene              | 91-57-6  |
| butyl benzyl phthalate   | 85-68-7   | 2-methylphenol                   | 95-48-7  |
| carbazole  | 86-74-8   | 3-methylphenol                   | 108-39-4 |
| 4-chloroaniline  | 106-47-8  | 4-methylphenol                   | 106-44-5 |
| 4-chlorodiphenyl ether   | 7005-72-3 | naphthalene                      | 91-20-3  |
| 4-chloro-3-methylphenol  | 59-50-7   | 2-nitroaniline                   | 88-74-4  |
| 2-chloronaphthalene  | 91-58-7   | 3-nitroaniline                   | 99-09-2  |
| 2-chlorophenol   | 95-57-8   | 4-nitroaniline                   | 100-01-6 |
| chrysene   | 218-01-9  | nitrobenzene                     | 98-95-3  |
| dibenz[a,h]anthracene  | 53-70-3   | 2-nitrophenol                    | 88-75-5  |
| dibenzofuran   | 132-64-9  | 4-nitrophenol                    | 100-02-7 |
| di-n-butyl phthalate   | 84-74-2   | N-nitrosodimethylamine           | 62-75-9  |
| 1,2-dichlorobenzene  | 95-50-1   | N-nitrosodi-n-propylamine        | 621-64-7 |
| 1,3-dichlorobenzene  | 541-73-1  | pentachlorophenol                | 87-86-5  |
| 1,4-dichlorobenzene  | 106-46-7  | phenanthrene                     | 85-01-8  |
| 2,4-dichlorophenol   | 120-83-2  | phenol                           | 108-95-2 |
| diethyl phthalate  | 84-66-2   | pyrene                           | 129-00-0 |
| 2,4-dimethylphenol   | 105-67-9  | pyridine                         | 110-86-1 |
| dimethyl phthalate   | 131-11-3  | 2,3,4,6-tetrachlorophenol        | 58-90-2  |
| 1,2-dinitrobenzene   | 528-29-0  | 1,2,4-trichlorobenzene           | 120-82-1 |
| 1,3-dinitrobenzene   | 99-65-0   | 2,4,5-trichlorophenol            | 95-95-4  |
| 1,4-dinitrobenzene   | 100-25-4  | 2,4,6-trichlorophenol            | 88-06-2  |
| 2,4-dinitrophenol  | 51-28-5   | dioctyl phthalate                | 117-81-7 |
| 2,4-dinitrotoluene   | 121-14-2  | bis(2-ethylhexyl) adipate        | 103-23-1 |

# EPA METHOD 8270

## Quality control products

| Semi Volatile (BNA) Matrix Spike Mix (11 components) |          | Product Number            | Size     |
|--|----------|---------------------------|----------|
| 2000 µg/mL in Methylene Chloride                     |          | DRE-GA09000422DI          | 1 mL     |
|  |          | DRE-GS09000422DI          | 5 x 1 mL |
| 5000 µg/mL in Methylene Chloride                     |          | DRE-GA09000423DI          | 1 mL     |
|  |          | DRE-GS09000423DI          | 5 x 1 mL |
| 10,000 µg/mL in Methylene Chloride                   |          | DRE-GA09000424DI          | 1 mL     |
|  |          | DRE-GS09000424DI          | 5 x 1 mL |
| acenaphthene   | 83-32-9  | N-nitrosodi-n-propylamine | 621-64-7 |
| 4-chloro-3-methylphenol                              | 59-50-7  | pentachlorophenol         | 87-86-5  |
| 2-chlorophenol                                       | 95-57-8  | phenol                    | 108-95-2 |
| 1,4-dichlorobenzene                                  | 106-46-7 | pyrene                    | 129-00-0 |
| 2,4-dinitrotoluene                                   | 121-14-2 | 1,2,4-trichlorobenzene    | 120-82-1 |
| 4-nitrophenol  | 100-02-7 |                           |          |

| EPA Method 8270 B/N Calibration Check Mix (7 components) |          | Product Number      | Size     |
|--|----------|---------------------|----------|
| 2000 µg/mL in Methylene Chloride                         |          | DRE-GA09000434DI    | 1 mL     |
| acenaphthene   | 83-32-9  | diphenylamine       | 122-39-4 |
| benzo[a]pyrene   | 50-32-8  | fluoranthene        | 206-44-0 |
| 1,4-dichlorobenzene                                      | 106-46-7 | hexachlorobutadiene | 87-68-3  |
| di-n-octyl phthalate                                     | 117-84-0 |                     |          |

| EPA Method 8270 Acid Calibration Check Mix (6 components) |          | Product Number        | Size     |
|---|----------|-----------------------|----------|
| 2000 µg/mL in Methylene Chloride                          |          | DRE-GA09000435DI      | 1 mL     |
| 4-chloro-3-methylphenol                                   | 59-50-7  | pentachlorophenol     | 87-86-5  |
| 2,4-dichlorophenol  | 120-83-2 | phenol                | 108-95-2 |
| 2-nitrophenol   | 88-75-5  | 2,4,6-trichlorophenol | 88-06-2  |

| EPA Method 8270 Internal Standard Mix (7 components) |            | Product Number   | Size      |
|--|------------|------------------|-----------|
| 2000 µg/mL in Methylene Chloride                     |            | DRE-GA09000428DI | 1 mL      |
|  |            | DRE-GS09000428DI | 5 x 1 mL  |
| 4000 µg/mL in Methylene Chloride                     |            | DRE-GA09000429DI | 1 mL      |
|  |            | DRE-GS09000429DI | 5 x 1 mL  |
| acenaphthene-d10                                     | 15067-26-2 | naphthalene-d8   | 1146-65-2 |
| chrysene-d12   | 1719-03-5  | perylene-d12     | 1520-96-3 |
| 1,4-dichlorobenzene-d4                               | 3855-82-1  | phenanthrene-d10 | 1517-22-2 |
| 1,4-dioxane-d8                                       | 17647-74-4 |                  |           |

# EPA METHOD 8270

## Color changing surrogates for pH indication in aqueous semi-volatile extractions EPA Method 8270 (BNA)

If you have ever calculated the expense and the level of frustration caused by a missed pH adjustment, you can understand the importance of getting it right the first time. With Color Changing Surrogates, the guess

work of wondering “did I change the pH” is removed. Base/Neutral samples are yellow and acidified samples are pink. Color change occurs between pH 3.4 – 4.8.

| Color Changing BNA Surrogates (7 components) |           | Product Number          | Size         |
|--|-----------|-------------------------|--------------|
| <b>pH Indicating 100 µg/mL in Methanol</b>   |           | <b>DRE-GA09000430ME</b> | <b>25 mL</b> |
| 2-fluorobiphenyl                             | 321-60-8  | pyrene-d10              | 1718-52-1    |
| 2-fluorophenol                               | 367-12-4  | p-terphenyl-d14         | 1718-51-0    |
| nitrobenzene-d5                              | 4165-60-0 | 2,4,6-tribromophenol    | 118-79-6     |
| phenol-d5                                    | 4165-62-2 |                         |              |

| BNA Surrogates (6 components)                  |           | Product Number          | Size      |
|--|-----------|-------------------------|-----------|
| <b>pH Indicating 100/200 µg/mL in Methanol</b> |           | <b>DRE-GA09000446ME</b> |           |
| 2-fluorobiphenyl                               | 321-60-8  |                         | 100 µg/mL |
| 2-fluorophenol                                 | 367-12-4  |                         | 200 µg/mL |
| nitrobenzene-d5                                | 4165-60-0 |                         | 100 µg/mL |
| phenol-d5                                      | 4165-62-2 |                         | 200 µg/mL |
| p-terphenyl-d14                                | 1718-51-0 |                         | 100 µg/mL |
| 2,4,6-tribromophenol                           | 118-79-6  |                         | 200 µg/mL |
| <b>pH Indicating 100/150 µg/mL in Methanol</b> |           | <b>DRE-GA09000447ME</b> |           |
| 2-fluorobiphenyl                               | 321-60-8  |                         | 100 µg/mL |
| 2-fluorophenol                                 | 367-12-4  |                         | 150 µg/mL |
| nitrobenzene-d5                                | 4165-60-0 |                         | 100 µg/mL |
| phenol-d5                                      | 4165-62-2 |                         | 150 µg/mL |
| p-terphenyl-d14                                | 1718-51-0 |                         | 100 µg/mL |
| 2,4,6-tribromophenol                           | 118-79-6  |                         | 150 µg/mL |

| BNA Surrogates (7 components)           |           | Product Number          | Size            |
|---|-----------|-------------------------|-----------------|
| <b>1000 µg/mL in Methylene Chloride</b> |           | <b>DRE-GA09000431DI</b> | <b>1 mL</b>     |
|   |           | <b>DRE-GS09000431DI</b> | <b>5 x 1 mL</b> |
| <b>5000 µg/mL in Methylene Chloride</b> |           | <b>DRE-GA09000432DI</b> | <b>1 mL</b>     |
|   |           | <b>DRE-GS09000432DI</b> | <b>5 x 1 mL</b> |
|   |           | <b>DRE-GA09000433DI</b> | <b>5 mL</b>     |
| 2-fluorobiphenyl                        | 321-60-8  | pyrene-d10              | 1718-52-1       |
| 2-fluorophenol                          | 367-12-4  | p-terphenyl-d14         | 1718-51-0       |
| nitrobenzene-d5                         | 4165-60-0 | 2,4,6-tribromophenol    | 118-79-6        |
| phenol-d5                               | 4165-62-2 |                         |                 |

# EPA METHOD 8270

## Quality control standards

| EPA Method 8270 Semi-volatile System Performance Check Mix (4 components) |         | Product Number            | Size     |
|---|---------|---------------------------|----------|
| 2000 µg/mL in Methylene Chloride  |         | DRE-GA09000436DI          | 1mL      |
| 2,4-dinitrophenol   | 51-28-5 | 4-nitrophenol             | 100-02-7 |
| hexachlorocyclopentadiene   | 77-47-4 | N-nitrosodi-n-propylamine | 621-64-7 |

## Tuning

| PFTBA MS Tuning Compound   |          | Product Number     | Size   |
|----------------------------|----------|--------------------|--------|
| (Perfluorotributylamine)   | 311-89-7 | DRE-C15987500 neat | 100 mg |
| 1000 µg/mL in P/T Methanol |          | DRE-GA09010390ME   | 1 mL   |

| GC Tuning Mix (4 components) |         | Product Number                       | Size      |
|------------------------------|---------|--------------------------------------|-----------|
| 500 µg/mL in Methanol        |         | DRE-GA09000425ME                     | 1 mL      |
|                              |         | DRE-GS09000425ME                     | 5 x 1 mL  |
| benzidine                    | 92-87-5 | decafluorotriphenylphosphine (DFTPP) | 5074-71-5 |
| p,p'-DDT                     | 50-29-3 | pentachlorophenol                    | 87-86-5   |

| DFTPP SV Tuning Compound       |           | Product Number   | Size     |
|--------------------------------|-----------|------------------|----------|
| (Decafluorotriphenylphosphine) | 5074-71-5 | DRE-GA09010393AC | 1 mL     |
| 1000 µg/mL in Acetone          |           | DRE-GS09010393AC | 5 x 1 mL |
| 2500 µg/mL in Acetone          |           | DRE-GA09010394AC | 1 mL     |
|                                |           | DRE-GS09010394AC | 5 x 1 mL |

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