

| Method   | TeknokromaP/N                                    | TeknokromaPhaseRecommendation                                                                                                                                        | Sample                                                                                      |
|----------|--------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|
| D1983    | TR-882162                                        | <b>TR-CN100</b> 60 m x 0.25 mm x 0.2 µm                                                                                                                              | FAME analysis                                                                               |
| D2245    | TR-882162                                        | <b>TR-CN100</b> 60 m x 0.25 mm x 0.2 µm                                                                                                                              | Oils and oil acids in solvent-reducible paints                                              |
| D2267    | TR-960462                                        | <b>TR-TCEP</b> 60 m x 0.25 mm x 0.40 µm                                                                                                                              | Aromatics in light naphthas and aviation gasolines                                          |
| D2306    | TR-140262                                        | <b>TRB-WAX</b> 60 m x 0.25 mm x 0.25 µm                                                                                                                              | C8 aromatic hydrocarbons                                                                    |
| D2360    | TR-140263                                        | <b>TRB-WAX</b> 60 m x 0.32 mm x 0.25 µm                                                                                                                              | Trace impurities in monocyclic aromatic hydrocarbons and total aromatic determination       |
| D2426    | TR-111535                                        | <b>TRB-1</b> 30 m x 0.53 mm x 1.5 µm                                                                                                                                 | Butadiene dimer and styrene in butadiene concentrates                                       |
| D2456    | TR-141035                                        | <b>TRB-WAX</b> 30 m x 0.53 mm x 1.0 µm                                                                                                                               | Polyhydric alcohols in alkyd resins                                                         |
| D2505    | TR-115035                                        | <b>TRB-1</b> 30 m x 0.53 mm x 5 µm                                                                                                                                   | Ethylene, other hydrocarbons, and carbon dioxide in dioxide in high-purity ethylene         |
| D2597    |                                                  | 30% SE-30 on Chromosorb PAW 80/100 - Molecular Sieve 13X 45/60                                                                                                       | Analysis of demethanized hydrocarbon liquid mixtures containing nitrogen and carbon dioxide |
| D2580    | TR-820423<br>TR-151035                           | <b>Meta.X5</b> 25 m x 0.32 mm x 0.4 µm<br><b>TRB-FFAP</b> 30 m x 0.53 mm x 1.0 µm                                                                                    | Phenols in water                                                                            |
| D2600    | TR-960462<br>TR-141223                           | <b>TR-TCEP</b> 60 m x 0.25 mm x 0.4 µm<br><b>TRB-WAX</b> 25 m x 0.32 mm x 1.2 µm                                                                                     | Aromatic traces in light saturated hydrocarbons                                             |
| D2743    | TR-882162                                        | <b>TR-CN100</b> 60 m x 0.25 mm x 0.2 µm                                                                                                                              | Oil and oil acids                                                                           |
| D2800    | TR-882162                                        | <b>TR-CN100</b> 60 m x 0.25 mm x 0.2 µm                                                                                                                              | FAME analysis                                                                               |
| D2804    | TR-141035<br>TR-571015                           | <b>TRB-WAX</b> 30 m x 0.53 mm x 1.0 µm<br><b>TRB-F50</b> 15 m x 0.53 mm x 1.0 µm                                                                                     | Purity of methyl ethyl ketone                                                               |
| D2887    | TR-112645                                        | <b>TRB-1</b> 10 m x 0.53 mm x 2.65 µm                                                                                                                                | Boiling range distribution of petroleum                                                     |
| Extended | TR-1108A5                                        | <b>TRB-1</b> 5 m x 0.53 mm x 0.88 µm                                                                                                                                 |                                                                                             |
| D2908    | TR-601833<br>TR-603035<br>TR-140533<br>TR-141035 | <b>TRB-624</b> 30 m x 0.32 mm x 1.8 µm<br><b>TRB-624</b> 30 m x 0.53 mm x 3.0 µm<br><b>TRB-WAX</b> 30 m x 0.32 mm x 0.5 µm<br><b>TRB-WAX</b> 30 m x 0.53 mm x 1.0 µm | Volatile organics in water                                                                  |
| D2998    | TR-111033                                        | <b>TRB-1</b> 30 m x 0.32 mm x 1.0 µm                                                                                                                                 | Polyhydric alcohols in alkyd resins                                                         |
| D2999    | TR-111535                                        | <b>TRB-1</b> 30 m x 0.53 mm x 1.5 µm                                                                                                                                 | Monopentaerythritol in commercial pentaerythritol                                           |
| D3009    | TR-140533<br>TR-141035                           | <b>TRB-WAX</b> 30 m x 0.32 mm x 0.5 µm<br><b>TRB-WAX</b> 30 m x 0.53 mm x 1.0 µm                                                                                     | Composition of turpentine                                                                   |
| D3054    | TR-110553                                        | <b>TRB-1</b> 50 m x 0.32 mm x 0.5 µm                                                                                                                                 | Impurities in cyclohexane                                                                   |
| D3086    | TR-120752                                        | <b>TRB-5</b> 50 m x 0.25 mm x 0.12 µm                                                                                                                                | Organochlorine pesticides in water                                                          |
| D3168    | TR-111033<br>TR-111535                           | <b>TRB-1</b> 30 m x 0.32 mm x 1.0 µm<br><b>TRB-1</b> 30 m x 0.53 mm x 1.5 µm                                                                                         | Polymers in emulsion paints                                                                 |
| D3257    |                                                  | 25% bis-(2-cyanoethyl)formamide on Chromosorb PAW                                                                                                                    | Aromatics in mineral spirits                                                                |
| D3271    | TR-141035                                        | <b>TRB-WAX</b> 30 m x 0.53 mm x 1.0 µm                                                                                                                               | Solvent analysis in paints                                                                  |
| D3304    | TR-120752                                        | <b>TRB-5</b> 50 m x 0.25 mm x 0.12 µm                                                                                                                                | PCBs in environmental materials                                                             |
| D3328    | TR-113033<br>TR-113035                           | <b>TRB-1</b> 30 m x 0.32 mm x 3.0 µm<br><b>TRB-1</b> 30 m x 0.53 mm x 3.0 µm                                                                                         | Comparison of waterborne petroleum oils                                                     |
| D3329    | TR-141065                                        | <b>TRB-WAX</b> 60 m x 0.53 mm x 1.0 µm                                                                                                                               | Purity of methyl isobutyl ketonespirits                                                     |
| D3432    | TR-111033<br>TR-111535                           | <b>TRB-1</b> 30 m x 0.32 mm x 1.0 µm<br><b>TRB-1</b> 30 m x 0.53 mm x 1.5 µm                                                                                         | Toluene diisocyanates in urethane prepolymers                                               |
| D3447    | TR-115055                                        | <b>TRB-1</b> 50 m x 0.53 mm x 5.0 µm                                                                                                                                 | Purity of trichlorotrifluoroethane (CFC-113)                                                |
| D3452    | TR-111535                                        | <b>TRB-1</b> 30 m x 0.53 mm x 1.5 µm                                                                                                                                 | Identification of rubber                                                                    |
| D3457    | TR-882162                                        | <b>TR-CN100</b> 60 m x 0.25 mm x 0.2 µm                                                                                                                              | FAME analysis                                                                               |
| D3465    | TR-115223<br>TR-111535                           | <b>TRB-1</b> 25 m x 0.32 mm x 0.52 µm<br><b>TRB-1</b> 30 m x 0.53 mm x 1.5 µm                                                                                        | Purity of monomeric plasticizers                                                            |
| D3524    | TR-110845                                        | <b>TRB-1</b> 10 m x 0.53 mm x 0.88 µm<br>10% OV-101 on Chromosorb WAW 80/100                                                                                         | Diesel fuel diluent used in diesel engine oil                                               |
| D3525    |                                                  | 10% Dixel 300 on Chromosorb WAW 80/100                                                                                                                               | Gasoline diluent in used gasoline engine oils                                               |
| D3534    | TR-120252                                        | <b>TRB-5</b> 50 m x 0.25 mm x 0.25 µm                                                                                                                                | PCBs in water                                                                               |
| D3606    | TR-510112<br>TR-960462                           | <b>TRB-1ms</b> 15 m x 0.25 mm x 0.1 µm<br><b>TR-TCEP</b> 60 m x 0.25 mm x 0.4 µm                                                                                     | Benzene and toluene in gasoline                                                             |
| D3687    | TR-140533<br>TR-141035                           | <b>TRB-WAX</b> 30 m x 0.32 mm x 0.5 µm<br><b>TRB-WAX</b> 30 m x 0.53 mm x 1.0 µm                                                                                     | Volatile organic compounds                                                                  |
| D3710    | TR-1150J5                                        | <b>TRB-1</b> 7.5 m x 0.53 mm x 5.0 µm                                                                                                                                | Boiling range distribution of gasoline and gasoline fractions                               |
| D3725    | TR-151035                                        | <b>TRB-FFAP</b> 30 m x 0.53 mm x 1.0 µm                                                                                                                              | Fatty acids in drying oils                                                                  |
| D3760    | TR-140263<br>TR-110563                           | <b>TRB-WAX</b> 60 m x 0.32 mm x 0.25 µm<br><b>TRB-1 60</b> m x 0.32 mm x 0.5 µm                                                                                      | Analysis of isopropylbenzene (cumene)                                                       |

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|--------|-------------------------------|-------------------------------------------------------------------------|-------------------------------------------------------------------------------------------|
| D3797  | TR-140563                     | <b>TRB-WAX</b> 60 m x 0.32 mm x 0.5 µm                                  | Analysis of o-Xylene                                                                      |
| D3798  | TR-140563                     | <b>TRB-WAX</b> 60m x 0.32 mm x 0.5 µm                                   | Analysis of p-Xylene                                                                      |
|        | TR-140263                     | <b>TRB-WAX</b> 60 m x 0.32 mm x 0.25 µm                                 |                                                                                           |
| D3876  | TR-111033                     | <b>TRB-1</b> 30 m x 0.32 mm x 1.0 µm                                    | Methoxyl and hydroxypropyl substitution in cellulose ether products                       |
|        | TR-111535                     | <b>TRB-1</b> 30 m x 0.53 mm x 1.5 µm                                    |                                                                                           |
| D3962  | TR-151035                     | <b>TRB-FFAP</b> 30 m x 0.53 mm x 1.0 µm                                 | Impurities in styrene                                                                     |
| D4059  | TR-120252                     | <b>TRB-5</b> 50 m x 0.25 mm x 0.25 µm                                   | PCBs in insulating liquids                                                                |
| D4275  | TR-113033                     | <b>TRB-1</b> 30 m x 0.32 mm x 3.0 µm                                    | Butylated hydroxy toluene in ethylene and ethylenevinylacetate polymers                   |
|        | TR-113035                     | <b>TRB-1</b> 30 m x 0.53 mm x 3.0 µm                                    |                                                                                           |
| D4367  |                               | 10% SE-30 on Chromosorb WAW 80/100<br>25% TCEP on Chromosorb PAW 80/100 | Benzene in hydrocarbon solvents                                                           |
| D4415  | TR-150233                     | <b>TRB-FFAP</b> 30 m x 0.32 mm x 0.25 µm                                | Determination of dimer and acrylic acid                                                   |
| D4420  | TR-510112                     | <b>TRB-1ms</b> 15 m x 0.25 mm x 0.1 µm                                  | Aromatics in gasoline                                                                     |
|        | TR-960462                     | <b>TR-TCEP</b> 60 m x 0.25 mm x 0.4 µm                                  |                                                                                           |
| D4492  | TR-140263                     | <b>TRB-WAX</b> 60 m x 0.32 mm x 0.25 µm                                 | Analysis of benzene                                                                       |
| D4534  | TR-960462                     | <b>TR-TCEP</b> 60 m x 0.25 mm x 0.4 µm                                  | Benzene content of cyclic products                                                        |
| D4735  | TR-151035                     | <b>TRB-FFAP</b> 30 m x 0.53 mm x 1.0 µm                                 | Trace thiophene in refined benzene                                                        |
| D4768  | TR-151035                     | <b>TRB-FFAP</b> 30 m x 0.53 mm x 1.0 µm                                 | Phenol and cresol inhibitors in insulating oils                                           |
| D4815  | TR-115035 +<br>TCEP precolumn | <b>TRB-1</b> 30 m x 0.53 mm x 5.0 µm +<br><b>TCEP precolumn</b> (56cm)  | MTBE, ETBE, TAME, DIPE, tert-amyl alcohol, C1-C4 alcohols in gasoline                     |
|        |                               |                                                                         |                                                                                           |
| D4864  | TR-121515                     | <b>TRB-5</b> 15 m x 0.53 mm x 1.5 µm                                    | Traces of methanol in propylene                                                           |
| D5008  | TR-115045                     | <b>TRB-1</b> 10 m x 0.53 mm x 5.0 µm                                    | Ethyl methyl pentanol content and purity of 2-ethylhexanol                                |
|        | TR-140233                     | <b>TRB-WAX</b> 30 m x 0.32 mm x 0.25 µm                                 |                                                                                           |
| D5060  | TR-140563                     | <b>TRB-WAX</b> 60m x 0.32 mm x 0.5 µm                                   | Impurities in high-purity ethylbenzene                                                    |
| D5134  | TR-110559                     | <b>TRB-50.2PONA</b> 50 m x 0.20 mm x 0.5 µm                             | Impurities in high-purity ethylbenzene                                                    |
| D5135  | TR-140563                     | <b>TRB-WAX</b> 60m x 0.32 mm x 0.5 µm                                   | Styrene analysis                                                                          |
|        |                               | 10% UCW-982 on Chromosorb PAW 80/100                                    |                                                                                           |
|        |                               | 3% OV-1 on Chromosorb WHP 80/100<br>10% SE-30 on Chromosorb PAW 80/100  | Boiling range distribution of crude oil-simulated distillation of crude oil through 538°C |
| D5310  | TR-120232                     | <b>TRB-5</b> 30 m x 0.25 mm x 0.25 µm                                   | Tar acid composition                                                                      |
|        | TR-252129                     | <b>TRB-225</b> 25 m x 0.20 mm x 0.20 µm                                 |                                                                                           |
| D5399  | TR-113045                     | <b>TRB-1</b> 10 m x 0.53 mm x 3.0 µm                                    | Boiling point distribution of hydrocarbon solvents                                        |
| D5441  | TR-110592                     | <b>TRB-1</b> 100m x 0.25 mm x 0.5 µm                                    | Analysis of MTBE                                                                          |
|        | TR-110559                     | <b>TRB-50.2PONA</b> 50 m x 0.20 mm x 0.5 µm                             |                                                                                           |
| D5442  | TR-110232                     | <b>TRB-1</b> 30 m x 0.25 mm x 0.25 µm                                   | Analysis of petroleum waxes                                                               |
|        | TR-120232                     | <b>TRB-5</b> 15 m x 0.25 mm x 0.25 µm                                   |                                                                                           |
| D5480  | TR-115065                     | <b>TRB-1</b> 60 m x 0.53 mm x 5.0 µm                                    | Engine oil volatility by GC                                                               |
| D5501  | TR-110592                     | <b>TRB-1</b> 100m x 0.25 mm x 0.5 µm                                    | Ethanol content of denatured fuel ethanol                                                 |
| D5504  | TR-974033                     | <b>TRB-SULFUR</b> 30 m x 0.32 mm x 4.0 µm                               | Sulfur compounds in natural gas and gaseous fuels by GC and SCD                           |
| D5580  | TR-115035 +<br>TCEP precolumn | <b>TRB-1</b> 30 m x 0.53 mm x 5.0 µm +<br><b>TCEP precolumn</b> (56cm)  | Aromatics in gasoline                                                                     |
|        |                               |                                                                         |                                                                                           |
| D5599  | TR-111062                     | <b>TRB-1</b> 60m x 0.25 mm x 1.0 µm                                     | Oxygenates in gasoline by GC and oxygen selective flame ionization detector               |
| D5623  | TR-114033                     | <b>TRB-1</b> 30m x 0.32 mm x 4.0 µm                                     | Sulfur compounds in light petroleum liquids by GC and sulfur selective detection          |
| D5713  | TR-110559                     | <b>TRB-50.2PONA</b> 50 m x 0.20 mm x 0.5 µm                             | Analysis of high-purity benzene for cyclohexane feedstock by capillary GC                 |
| D5769  | TR-111062                     | <b>TRB-1</b> 60m x 0.25 mm x 1.0 µm                                     | Determination of benzene, toluene and total aromatics in finished gasoline by GC/MS       |
|        | TR-115063                     | <b>TRB-1</b> 60 m x 0.32 mm x 5.0 µm                                    |                                                                                           |
| D5917  | TR-140263                     | <b>TRB-WAX</b> 60m x 0.32 mm x 0.25 µm                                  | Trace impurities in monocyclic aromatic hydrocarbons by GC and external calibration       |
| D6144  | TR-111062                     | <b>TRB-1</b> 60m x 0.25 mm x 1.0 µm                                     | alpha-Methylstyrene by capillary GC                                                       |
| D6159  | TR-115035                     | <b>TRB-1</b> 30 m x 0.53 mm x 5.0 µm                                    | Hydrocarbon impurities in ethylene                                                        |
| E0202  | TR-812122                     | <b>Meta.WAX</b> 25 m x 0.25 mm x 0.2 µm                                 | Analysis of glycols                                                                       |
| E1100  | TR-810535                     | <b>Meta.WAX</b> 30 m x 0.53 mm x 0.50 µm                                | Analysis of denatured ethanol                                                             |