

**Table S1.** Analytical method validation and optimized MRM transitions of n=108 pesticides, n=18 PCBs and n=13 PAHs under analysis.

| Nº.                           | Compound                | Transition 1<br>(m/z) | CE 1<br>(eV) | Transition 2<br>(m/z) | CE 2<br>(eV) | R <sup>2</sup> | LOD<br>(µg/Kg) | LOQ<br>(µg/Kg) |
|-------------------------------|-------------------------|-----------------------|--------------|-----------------------|--------------|----------------|----------------|----------------|
| <b>Pesticides</b>             |                         |                       |              |                       |              |                |                |                |
| <i>Carbamates</i>             |                         |                       |              |                       |              |                |                |                |
| 1                             | (±)-Indoxacarb          | 218 → 203             | 10           | 218 → 134             | 20           | 0.993          | 0.15           | 0.56           |
| 2                             | Bendiocarb              | 166 → 151             | 10           | 166 → 109             | 20           | 0.999          | 0.03           | 0.10           |
| 3                             | Carbaryl                | 144 → 115             | 20           | 115 → 89              | 20           | 0.997          | 0.09           | 0.33           |
| 4                             | Carbofuran              | 164 → 149             | 15           | 164 → 103             | 20           | 0.995          | 0.06           | 0.18           |
| 5                             | Carbophenothion         | 157 → 121             | 20           | 157 → 77              | 20           | 0.996          | 0.06           | 0.20           |
| 6                             | Diethofencarb           | 267 → 225             | 10           | 267 → 168             | 20           | 1.000          | 0.05           | 0.17           |
| 7                             | Ethiofencarb            | 168 → 107             | 10           | 168 → 77              | 25           | 0.999          | 0.08           | 0.27           |
| 8                             | Furathiocarb            | 194 → 105             | 20           | 194 → 165             | 15           | 0.988          | 0.06           | 0.22           |
| 9                             | Phenoxycarb             | 116 → 88              | 15           | 186 → 109             | 15           | 0.996          | 0.13           | 0.42           |
| 10                            | Pirimicarb              | 238 → 166             | 10           | 206 → 166             | 15           | 0.992          | 0.03           | 0.09           |
| <i>Carbamates /Acaricides</i> |                         |                       |              |                       |              |                |                |                |
| 11                            | Mecarbam                | 296 → 196             | 10           | 296 → 168             | 10           | 0.996          | 1.16           | 4.17           |
| <i>Fungicides</i>             |                         |                       |              |                       |              |                |                |                |
| 12                            | Azoxystrobin            | 344 → 329             | 20           | 344 → 183             | 20           | 0.990          | 0.07           | 0.25           |
| 13                            | Boscalid                | 342 → 140             | 10           | 342 → 112             | 25           | 0.986          | 0.15           | 0.56           |
| 14                            | Bupirimate              | 208 → 165             | 15           | 108 → 140             | 15           | 0.999          | 0.96           | 3.81           |
| 15                            | Captafol                | 151 → 79              | 20           | 151 → 122             | 10           | 0.994          | 0.04           | 0.12           |
| 16                            | Captan                  | 107 → 79              | 10           | 107 → 77              | 20           | 0.987          | 1.30           | 4.79           |
| 17                            | Cyproconazole isomer II | 222 → 125             | 20           | 224 → 127             | 20           | 0.999          | 0.06           | 0.19           |
| 18                            | Diclobutrazol           | 270 → 159             | 10           | 270 → 137             | 25           | 0.962          | 0.11           | 0.30           |
| 19                            | Fenarimol               | 251 → 139             | 20           | 251 → 111             | 25           | 0.973          | 0.31           | 1.10           |
| 20                            | Fenhexamid              | 177 → 78              | 20           | 177 → 113             | 20           | 0.929          | 2.58           | 8.04           |
| 21                            | Fluodioxonil            | 248 → 127             | 20           | 248 → 154             | 25           | 0.965          | 0.40           | 1.27           |
| 22                            | Flusilazole             | 233 → 165             | 20           | 233 → 152             | 20           | 0.982          | 2.55           | 8.36           |
| 23                            | Imazalil                | 215 → 173             | 15           | 215 → 145             | 25           | 0.987          | 0.28           | 0.92           |
| 24                            | Kresoxim methyl         | 206 → 131             | 10           | 206 → 116             | 10           | 1.000          | 1.38           | 4.23           |
| 25                            | Metalaxyl-M             | 160 → 130             | 20           | 160 → 144             | 20           | 0.993          | 0.08           | 0.25           |
| 26                            | Mepronil                | 269 → 119             | 10           | 210 → 181             | 20           | 0.996          | 0.07           | 0.23           |
| 27                            | Penconazole             | 248 → 157             | 20           | 248 → 192             | 20           | 0.990          | 0.41           | 1.34           |
| 28                            | Prochloraz              | 180 → 138             | 15           | 180 → 69              | 20           | 0.990          | 1.07           | 3.05           |
| 29                            | Procymidone             | 283 → 96              | 10           | 285 → 96              | 15           | 0.991          | 0.13           | 0.48           |
| 30                            | Pyrimethanil            | 198 → 118             | 30           | 199 → 198             | 25           | 0.983          | 0.25           | 0.82           |
| 31                            | Quintozen               | 237 → 143             | 20           | 237 → 119             | 20           | 0.999          | 0.12           | 0.36           |
| 32                            | Tebuconazole            | 250 → 125             | 15           | 125 → 89              | 25           | 1.000          | 0.15           | 0.49           |
| 33                            | Tolchlophos methyl      | 265 → 250             | 20           | 265 → 93              | 24           | 0.966          | 0.38           | 1.26           |
| 34                            | Triadimefon             | 208 → 181             | 10           | 208 → 127             | 15           | 0.997          | 0.09           | 0.34           |
| 35                            | Trifloxystrobin         | 190 → 130             | 15           | 190 → 102             | 25           | 0.988          | 0.31           | 1.06           |
| 36                            | Vinclozolin             | 212 → 177             | 15           | 212 → 145             | 20           | 0.997          | 2.48           | 8.18           |
| <i>Herbicides</i>             |                         |                       |              |                       |              |                |                |                |
| 37                            | Amandryn                | 227 → 170             | 10           | 227 → 185             | 10           | 0.993          | 2.53           | 8.26           |
| 38                            | Atrazine                | 200 → 122             | 15           | 215 → 200             | 10           | 0.998          | 0.11           | 0.45           |
| 39                            | Diflufenican            | 266 → 183             | 25           | 246 → 218             | 25           | 0.995          | 5.09           | 14.57          |
| 40                            | Linuron                 | 160 → 133             | 15           | 160 → 125             | 15           | 0.979          | 5.54           | 18.74          |
| 41                            | Methabenzthiazuron      | 164 → 136             | 15           | 127 → 109             | 20           | 0.997          | 0.06           | 0.22           |
| 42                            | Oxyfluorfen             | 300 → 223             | 20           | 252 → 170             | 25           | 0.981          | 0.36           | 1.38           |

|                                     |                     |           |    |           |    |       |      |       |
|-------------------------------------|---------------------|-----------|----|-----------|----|-------|------|-------|
| 43                                  | Propazine           | 214 → 172 | 15 | 214 → 94  | 20 | 0.973 | 0.07 | 0.20  |
| 44                                  | Propyzamide         | 173 → 145 | 15 | 173 → 109 | 25 | 0.997 | 0.04 | 0.10  |
| 45                                  | Simazine            | 201 → 173 | 7  | 201 → 186 | 8  | 0.999 | 0.06 | 0.22  |
| 46                                  | Terbuthilazine      | 214 → 104 | 15 | 214 → 132 | 10 | 0.998 | 0.13 | 0.40  |
| 47                                  | Trifluralin         | 264 → 160 | 15 | 264 → 206 | 10 | 0.975 | 5.28 | 17.89 |
| <i>Insect growth regulators</i>     |                     |           |    |           |    |       |      |       |
| 48                                  | Buprofezin          | 175 → 132 | 15 | 175 → 117 | 20 | 0.952 | 0.17 | 0.63  |
| 49                                  | Cyromazine          | 151 → 109 | 15 | 165 → 123 | 20 | 0.994 | 0.05 | 0.17  |
| 50                                  | Pyriproxyfen        | 136 → 78  | 20 | 136 → 96  | 20 | 0.997 | 0.18 | 0.64  |
| <i>Organochlorine pesticides</i>    |                     |           |    |           |    |       |      |       |
| 51                                  | 2,4'-DDD            | 235 → 165 | 20 | 237 → 165 | 20 | 0.991 | 0.09 | 0.33  |
| 52                                  | 2,4'-DDE            | 246 → 176 | 20 | 318 → 248 | 20 | 0.963 | 0.55 | 1.62  |
| 53                                  | 2,4'-DDT            | 235 → 165 | 20 | 237 → 165 | 20 | 0.994 | 0.26 | 0.79  |
| 54                                  | 4,4'-DDD            | 235 → 165 | 20 | 237 → 165 | 20 | 0.999 | 0.11 | 0.35  |
| 55                                  | 4,4'-DDE            | 246 → 176 | 30 | 318 → 248 | 30 | 0.997 | 0.16 | 0.56  |
| 56                                  | 4,4'-DDT            | 235 → 165 | 20 | 237 → 165 | 20 | 0.999 | 2.31 | 8.17  |
| 57                                  | Alachlor            | 188 → 160 | 15 | 161 → 146 | 15 | 0.987 | 0.04 | 0.12  |
| 58                                  | Aldrin              | 263 → 193 | 20 | 293 → 258 | 20 | 0.992 | 0.76 | 2.88  |
| 59                                  | cis-Chlordane       | 373 → 266 | 20 | 373 → 264 | 20 | 0.997 | 0.20 | 0.64  |
| 60                                  | Dicofol             | 250 → 139 | 20 | 250 → 215 | 10 | 0.993 | 0.12 | 0.38  |
| 61                                  | Dieldrin            | 263 → 193 | 20 | 263 → 228 | 20 | 0.992 | 0.19 | 0.73  |
| 62                                  | Endosulfan sulfate  | 272 → 237 | 15 | 274 → 239 | 15 | 0.997 | 0.09 | 0.37  |
| 63                                  | Endosulfan $\alpha$ | 241 → 206 | 25 | 241 → 170 | 25 | 0.994 | 0.15 | 0.46  |
| 64                                  | Endosulfan $\beta$  | 195 → 160 | 10 | 195 → 125 | 20 | 0.999 | 0.07 | 0.20  |
| 65                                  | Endrin              | 263 → 193 | 20 | 281 → 245 | 15 | 0.984 | 0.13 | 0.49  |
| 66                                  | Methoxychlor        | 227 → 169 | 20 | 227 → 141 | 25 | 0.973 | 0.14 | 0.46  |
| 67                                  | trans-Chlordane     | 373 → 266 | 20 | 373 → 264 | 20 | 0.972 | 0.12 | 0.47  |
| 68                                  | $\alpha$ -HCH       | 181 → 145 | 10 | 219 → 183 | 10 | 0.988 | 0.04 | 0.13  |
| 69                                  | $\beta$ -HCH        | 181 → 145 | 15 | 219 → 183 | 10 | 0.985 | 0.22 | 0.82  |
| 70                                  | $\gamma$ -HCH       | 181 → 145 | 15 | 219 → 183 | 10 | 0.996 | 0.11 | 0.43  |
| <i>Organophosphorous pesticides</i> |                     |           |    |           |    |       |      |       |
| 71                                  | Acephate            | 136 → 94  | 10 | 136 → 119 | 8  | 0.989 | 0.33 | 1.15  |
| 72                                  | Andhion             | 231 → 175 | 15 | 231 → 129 | 20 | 0.972 | 0.34 | 1.09  |
| 73                                  | Azinphos ethyl      | 160 → 132 | 5  | 160 → 77  | 10 | 0.994 | 0.29 | 0.95  |
| 74                                  | Chlorpyrifos        | 197 → 169 | 15 | 197 → 169 | 15 | 0.999 | 1.58 | 5.71  |
| 75                                  | Chlorpyrifos methyl | 286 → 93  | 25 | 286 → 271 | 20 | 0.984 | 0.76 | 2.78  |
| 76                                  | cis-Chlorfenvinphos | 267 → 159 | 20 | 269 → 161 | 20 | 0.984 | 0.09 | 0.31  |
| 77                                  | Coumaphos           | 226 → 163 | 20 | 226 → 135 | 25 | 0.999 | 0.26 | 0.92  |
| 78                                  | Diazinon            | 137 → 84  | 15 | 179 → 137 | 20 | 0.992 | 0.09 | 0.35  |
| 79                                  | Dimethoate          | 125 → 79  | 20 | 125 → 79  | 8  | 1.000 | 0.11 | 0.37  |
| 80                                  | Fenamiphos          | 303 → 154 | 15 | 303 → 195 | 10 | 0.988 | 0.10 | 0.33  |
| 81                                  | Fenchlorphos        | 285 → 270 | 20 | 285 → 240 | 20 | 0.990 | 0.06 | 0.21  |
| 82                                  | Fenitrothion        | 125 → 79  | 15 | 277 → 125 | 18 | 0.998 | 0.07 | 0.26  |
| 83                                  | Fenthion            | 278 → 109 | 20 | 278 → 125 | 22 | 0.995 | 0.19 | 0.58  |
| 84                                  | Fenthion Sulfone    | 310 → 105 | 20 | 310 → 109 | 30 | 0.976 | 0.74 | 2.79  |
| 85                                  | Fenthion Sulfoxide  | 278 → 109 | 15 | 278 → 169 | 25 | 0.998 | 0.04 | 0.15  |
| 86                                  | Malathion           | 173 → 99  | 15 | 173 → 117 | 15 | 1.000 | 0.09 | 0.28  |
| 87                                  | Methidathion        | 145 → 85  | 10 | 145 → 58  | 20 | 0.992 | 0.07 | 0.20  |
| 88                                  | Omethoate           | 156 → 110 | 10 | 156 → 79  | 30 | 0.994 | 0.14 | 0.45  |
| 89                                  | Parathion methyl    | 263 → 109 | 15 | 263 → 246 | 6  | 1.000 | 0.06 | 0.15  |
| 90                                  | Phenthoate          | 274 → 125 | 15 | 274 → 121 | 15 | 0.999 | 0.11 | 0.33  |

|                                |                               |           |    |           |    |       |      |      |
|--------------------------------|-------------------------------|-----------|----|-----------|----|-------|------|------|
| 91                             | Phosalone                     | 182 → 111 | 20 | 182 → 75  | 30 | 0.995 | 0.06 | 0.17 |
| 92                             | Phosmet                       | 160 → 77  | 25 | 160 → 133 | 15 | 0.997 | 0.04 | 0.15 |
| 93                             | Phoxim                        | 109 → 81  | 15 | 109 → 91  | 15 | 1.000 | 0.10 | 0.34 |
| 94                             | Quinalphos                    | 146 → 118 | 15 | 146 → 91  | 30 | 0.994 | 0.07 | 0.22 |
| 95                             | <i>trans</i> -Chlorfenvinphos | 267 → 159 | 20 | 269 → 161 | 20 | 0.996 | 0.08 | 0.29 |
| 96                             | Triphenyl phosphate           | 325 → 169 | 20 | 325 → 77  | 25 | 0.998 | 0.09 | 0.34 |
| <i>Pyrethroid insecticides</i> |                               |           |    |           |    |       |      |      |
| 97                             | Carbophenothion               | 157 → 121 | 20 | 157 → 77  | 20 | 0.999 | 0.10 | 0.37 |
| 98                             | Pirimiphos-methyl             | 290 → 125 | 15 | 290 → 151 | 15 | 0.992 | 0.14 | 0.46 |
| 99                             | <i>cis</i> -Fluvalinate       | 250 → 55  | 15 | 252 → 55  | 20 | 0.997 | 0.39 | 1.18 |
| 100                            | <i>cis</i> -Permethrin        | 183 → 153 | 15 | 183 → 168 | 15 | 1.000 | 0.06 | 0.20 |
| 101                            | Cypermethrin isomer I         | 181 → 152 | 20 | 163 → 91  | 15 | 0.995 | 0.06 | 0.22 |
| 102                            | Cypermethrin isomer II        | 181 → 152 | 20 | 163 → 91  | 15 | 0.998 | 0.09 | 0.30 |
| 103                            | Cypermethrin isomer III       | 181 → 152 | 20 | 163 → 91  | 15 | 0.997 | 0.07 | 0.24 |
| 104                            | Deltamethrin                  | 181 → 152 | 20 | 253 → 93  | 15 | 1.000 | 0.08 | 0.27 |
| 105                            | <i>trans</i> -Fluvalinate     | 250 → 55  | 15 | 252 → 55  | 20 | 0.996 | 0.08 | 0.29 |
| 106                            | <i>trans</i> -Permethrin      | 183 → 153 | 20 | 183 → 168 | 20 | 0.984 | 0.10 | 0.36 |
| 107                            | $\Lambda$ -Cyhalothrin        | 181 → 152 | 25 | 197 → 141 | 10 | 0.989 | 0.13 | 0.41 |
| <i>Synergists</i>              |                               |           |    |           |    |       |      |      |
| 108                            | Piperonyl butoxide            | 176 → 131 | 15 | 176 → 103 | 20 | 0.999 | 0.05 | 0.18 |
| <i>PCBs</i>                    |                               |           |    |           |    |       |      |      |
| 1                              | PCB28                         | 256 → 186 | 15 | 258 → 186 | 15 | 1.000 | 0.15 | 0.48 |
| 2                              | PCB52                         | 290 → 220 | 15 | 292 → 222 | 15 | 0.998 | 0.07 | 0.22 |
| 3                              | PCB77                         | 290 → 220 | 20 | 292 → 222 | 20 | 1.000 | 0.12 | 0.41 |
| 4                              | PCB81                         | 290 → 220 | 20 | 292 → 222 | 20 | 0.999 | 0.06 | 0.22 |
| 5                              | PCB101                        | 324 → 254 | 20 | 326 → 256 | 20 | 0.997 | 0.08 | 0.24 |
| 6                              | PCB105                        | 324 → 254 | 20 | 326 → 256 | 20 | 0.990 | 0.04 | 0.15 |
| 7                              | PCB114                        | 324 → 254 | 20 | 326 → 256 | 20 | 0.992 | 0.12 | 0.39 |
| 8                              | PCB118                        | 324 → 254 | 20 | 326 → 256 | 20 | 0.998 | 0.12 | 0.35 |
| 9                              | PCB123                        | 324 → 254 | 20 | 326 → 256 | 20 | 1.000 | 0.04 | 0.14 |
| 10                             | PCB126                        | 324 → 254 | 20 | 326 → 256 | 20 | 0.987 | 0.03 | 0.10 |
| 11                             | PCB138                        | 360 → 290 | 25 | 362 → 292 | 25 | 0.980 | 0.10 | 0.36 |
| 12                             | PCB153                        | 360 → 290 | 25 | 362 → 292 | 25 | 0.999 | 0.05 | 0.19 |
| 13                             | PCB156                        | 360 → 290 | 30 | 362 → 292 | 30 | 0.998 | 0.04 | 0.15 |
| 14                             | PCB157                        | 360 → 290 | 30 | 362 → 292 | 30 | 0.975 | 0.16 | 0.55 |
| 15                             | PCB167                        | 360 → 290 | 30 | 362 → 292 | 30 | 0.997 | 0.11 | 0.43 |
| 16                             | PCB169                        | 360 → 290 | 30 | 362 → 292 | 30 | 0.995 | 0.07 | 0.24 |
| 17                             | PCB180                        | 394 → 324 | 20 | 396 → 326 | 20 | 0.993 | 0.03 | 0.11 |
| 18                             | PCB189                        | 394 → 324 | 25 | 396 → 326 | 25 | 0.999 | 0.04 | 0.12 |
| <i>PAHs</i>                    |                               |           |    |           |    |       |      |      |
| 1                              | Acenaphthylene                | 152 → 126 | 30 | 152 → 102 | 30 | 0.992 | 0.06 | 0.19 |
| 2                              | Anthracene                    | 178 → 152 | 25 | 176 → 150 | 25 | 0.993 | 0.07 | 0.20 |
| 3                              | Benzo[a]anthracene            | 228 → 226 | 30 | 228 → 202 | 20 | 0.991 | 0.06 | 0.21 |
| 4                              | Benzo[a]pyrene                | 252 → 250 | 35 | 252 → 226 | 20 | 0.998 | 0.08 | 0.25 |
| 5                              | Benzo[b]fluoranthene          | 252 → 250 | 35 | 126 → 113 | 10 | 0.989 | 0.28 | 0.89 |
| 6                              | Benzo[g,h,i]perylene          | 276 → 274 | 45 | 276 → 272 | 50 | 0.999 | 0.07 | 0.21 |
| 7                              | Benzo[k]fluoranthene          | 252 → 250 | 35 | 126 → 113 | 10 | 0.994 | 0.14 | 0.48 |
| 8                              | Chrysene                      | 228 → 226 | 30 | 228 → 202 | 20 | 0.990 | 0.06 | 0.17 |
| 9                              | Dibenzo[a,h]anthracene        | 278 → 276 | 30 | 278 → 252 | 20 | 0.998 | 0.06 | 0.23 |
| 10                             | Fluorene                      | 166 → 165 | 15 | 165 → 164 | 20 | 0.996 | 0.04 | 0.15 |
| 11                             | Indeno[1,2,3-cd]pyrene        | 276 → 274 | 30 | 137 → 136 | 15 | 0.995 | 0.09 | 0.29 |

|           |              |           |    |           |    |       |      |      |
|-----------|--------------|-----------|----|-----------|----|-------|------|------|
| <b>12</b> | Phenanthrene | 178 → 152 | 25 | 176 → 150 | 25 | 1.000 | 0.05 | 0.16 |
| <b>13</b> | Pyrene       | 202 → 200 | 20 | 202 → 152 | 30 | 0.996 | 1.28 | 4.19 |

CE, Collision Energy; R<sup>2</sup>, determination coefficient; LOD, Limit of Detection; LOQ, Limit of Quantification

**Table S2.** Analytical method validation and monitored ions of n=10 PAEs and n=8 NPPs under analysis.

| N°.         | Compound                          | Abbreviation | Monitored ions<br>(m/z) | R <sup>2</sup> | LOD<br>(mg/Kg) | LOQ<br>(mg/Kg) |
|-------------|-----------------------------------|--------------|-------------------------|----------------|----------------|----------------|
| <i>PAEs</i> |                                   |              |                         |                |                |                |
| 1           | Dimethyl Phthalate                | DMP          | <u>163</u> , 92, 164    | 0.996          | 0.007          | 0.021          |
| 2           | Diethyl Phthalate                 | DEP          | <u>149</u> , 177, 176   | 0.995          | 0.003          | 0.010          |
| 3           | Dipropyl Phthalate                | DPrP         | <u>149</u> , 150, 209   | 0.991          | 0.004          | 0.013          |
| 4           | Dibutyl Phthalate                 | DBP          | <u>149</u> , 150, 223   | 0.990          | 0.006          | 0.021          |
| 5           | Diisobutyl Phthalate              | DiBP         | <u>149</u> , 150, 223   | 0.997          | 0.007          | 0.027          |
| 6           | Butyl Benzyl Phthalate            | BBP          | <u>149</u> , 91, 206    | 0.999          | 0.004          | 0.012          |
| 7           | Diphenyl Phthalate                | DPhP         | <u>225</u> , 226, 104   | 0.992          | 0.018          | 0.062          |
| 8           | Dicyclohexyl Phthalate            | DcHexP       | <u>149</u> , 167, 150   | 0.999          | 0.028          | 0.087          |
| 9           | Diheptyl Phthalate                | DHepP        | <u>149</u> , 99, 265    | 0.997          | 0.177          | 0.555          |
| 10          | Di(2-ethylhexyl) Phthalate        | DEHP         | <u>149</u> , 167, 279   | 0.999          | 0.007          | 0.025          |
| <i>NPPs</i> |                                   |              |                         |                |                |                |
| 1           | Dimethyl Adipate                  | DMA          | <u>114</u> , 101, 111   | 0.998          | 0.011          | 0.033          |
| 2           | Diethyl Adipate                   | DEA          | <u>111</u> , 157, 128   | 0.992          | 0.003          | 0.010          |
| 3           | Benzyl Benzoate                   | BB           | <u>105</u> , 91, 212    | 0.987          | 0.012          | 0.043          |
| 4           | Dibutyl Adipate                   | DBA          | <u>129</u> , 185, 111   | 0.989          | 0.023          | 0.071          |
| 5           | Diisobutyl Adipate                | DiBA         | <u>129</u> , 185, 111   | 0.993          | 0.009          | 0.029          |
| 6           | Di(2-ethylhexyl) Adipate          | DEHA         | <u>129</u> , 112, 147   | 0.982          | 0.014          | 0.044          |
| 7           | Di(2-ethylhexyl)<br>Terephthalate | DEHT         | <u>149</u> , 112, 261   | 0.988          | 0.009          | 0.033          |
| 8           | Di(2-ethylhexyl) Sebacate         | DEHS         | <u>185</u> , 149, 112   | 0.997          | 0.048          | 0.182          |

R<sup>2</sup>, coefficient of determination; LOD, Limit of Detection; LOQ, Limit of Quantification.

Underlined ions were considered for quantitative analysis.

**Table S3.** Analytical method validation and MS/MS condition of n=9 BPs under analysis.

| N°. | Compound   | Abbreviation | Transition 1<br>(m/z) | CE 1<br>(eV) | Transition 2<br>(m/z) | CE 2<br>(eV) | R <sup>2</sup> | LOD<br>(µg/Kg) | LOQ<br>(µg/Kg) |
|-----|--|--------------|-----------------------|--------------|-----------------------|--------------|----------------|----------------|----------------|
| 1   | 4,4'-Sulfonyldiphenol                            | BPS          | 249.2 → 107.9         | 15           | 249.27 → 156.0        | 12           | 0.998          | 0.297          | 1.142          |
| 2   | 4,4'-Methylenediphenol                           | BPF          | 199.2 → 93.1          | 13           | 199.23 → 105.1        | 14           | 0.993          | 0.385          | 1.362          |
| 3   | 1,1-Bis(4-hydroxyphenyl)<br>ethane               | BPE          | 213.3 → 198.0         | 38           | 213.26 → 194.9        | 40           | 0.992          | 0.328          | 1.168          |
| 4   | 4,4'-(propan-2,2-diyl)<br>diphenol               | BPA          | 227.3 → 212.1         | 17           | 227.29 → 133.0        | 18           | 0.988          | 0.431          | 1.457          |
| 5   | 4-[2-(4-hydroxyphenyl)<br>butan-2-yl] phenol     | BPB          | 241.3 → 212.0         | 20           | 241.31 → 211.0        | 21           | 0.995          | 0.289          | 0.945          |
| 6   | 2,2-Bis(4-hydroxyphenyl)<br>hexafluoropropane    | BPAF         | 335.3 → 265.0         | 35           | 335.30 → 177.0        | 33           | 0.996          | 0.276          | 0.839          |
| 7   | 1,1-Bis(4-hydroxyphenyl)-1-<br>phenyl-ethane     | BPAP         | 289.4 → 274.1         | 10           | 289.36 → 273.1        | 10           | 0.994          | 0.462          | 1.591          |
| 8   | 1,1-Bis(4-hydroxyphenyl)-<br>cyclohexane         | BPZ          | 267.3 → 145.0         | 17           | 267.30 → 173.1        | 18           | 0.997          | 0.435          | 1.483          |
| 9   | 1,4-Bis(2-(4-hydroxyphenyl)-<br>2-propyl)benzene | BPP          | 345.5 → 330.1         | 33           | 345.46 → 133.1        | 34           | 0.989          | 0.414          | 1.436          |

CE, Collision Energy; R<sup>2</sup>, coefficient of determination; LOD, Limit of Detection; LOQ, Limit of Quantification.