



# Extractables & Leachables

Reference Standards

## EXTRACTABLES & LEACHABLES — REFERENCE STANDARDS

**Confident E&L assessment for pharma packaging, devices & bioprocess systems**

### WHAT THIS CATALOGUE IS FOR

Extractables are compounds released from packaging materials under aggressive conditions; leachables are those that migrate into the drug product over time. This catalogue provides fit-for-purpose reference standards and mixes for risk assessment, method development, and routine monitoring.

### WHERE IT APPLIES

Parenterals, ophthalmics, inhalation products, transdermal, topical formulations, oral liquids, biologics & biosimilars, implantable drug delivery systems, and certain oral solid dosage forms, Pre-filled syringes & cartridges Vials/stoppers/seals Single-Use Systems (tubing, bags, filters, bioreactors)

E&Ls can adversely impact a drug's potency, stability, safety, and/or effectiveness, which makes their analysis critical. Pharmaceutical manufacturers are required by regulatory agencies to demonstrate that any substances that migrate from packaging materials into a drug remain below harmful levels during the product's expected shelf life.

### OUR PRODUCT RANGE

Polymer additives  
Residual monomers & oligomers  
Elastomer/rubber extractables  
Process/printing/adhesive related  
Ready-to-use mixture

### QUALITY & COMPLIANCE

ISO 17034/17025-aligned production and testing; Material will be supplied along with the COA, HPLC/GC, HNMR, MASS, IR and TGA

**Ordering at a glance:**

**Custom pack size available from mg to gm scale.**

| Catalogue no. | Product Name   | Cas no.      |
|---------------|--|--------------|
| CP-EL0001     | 2-Ethylhexyl methyl isophthalate                                     | 2135327-80-7 |
| CP-EL0002     | Bis(2-ethylhexyl) terephthalate                                      | 6422-86-2    |
| CP-EL0003     | Methyl 9,10-epoxystearate  | 2500-59-6    |
| CP-EL0004     | Bis(2-ethylhexyl) isophthalate                                       | 137-89-3     |
| CP-EL0005     | 2-Ethyl-1-hexene   | 1632-16-2    |
| CP-EL0006     | 2-Chloro-octane  | 628-61-5     |
| CP-EL0007     | 3-(Chloromethyl)heptane  | 123-04-6     |
| CP-EL0008     | Benzyl 2-Naphthyl Ether  | 613-62-7     |
| CP-EL0009     | Bis(2-ethylhexyl) isophthalate                                       | 137-89-3     |
| CP-EL0010     | 2-Ethylhexyl stearate  | 22047-49-0   |
| CP-EL0011     | 1,16-Dichlorohexadecane  | 7735-39-9    |
| CP-EL0012     | 1,4-Bis(trimethylsilyl)benzene                                       | 13183-70-5   |
| CP-EL0013     | 1-Iodoctadecane  | NA           |
| CP-EL0014     | 2,2`-(1,4-Phenylene)bis(3,1-benzoxazin-4-one)                        | 18600-59-4   |
| CP-EL0015     | Diocetyl 3,3'-Thiodipropionate                                       | 693-36-7     |
| CP-EL0016     | Tris(2,4-di-tert-butylphenyl)phosphite                               | 31570-04-4   |
| CP-EL0017     | Ethyl 3-(3-tert-Butyl-4-hydroxy-5-methylphenyl)propionate            | 40200-35-9   |
| CP-EL0018     | 2-Benzyl-2-(dimethylamino)-1-[4-(morpholin-4-yl)phenyl]butan-1-one   | 119313-12-1  |
| CP-EL0019     | 1,3,5-Tris(3,5-di-tert-butyl-4-hydroxybenzyl)-2,4,6-trimethylbenzene | 1709-70-2    |
| CP-EL0020     | Octadecyl 3-(3,5-Di-tert-butyl-4-hydroxyphenyl)propionate            | 2082-79-3    |
| CP-EL0021     | 2-Bromopalmitic Acid   | 18263-25-7   |
| CP-EL0022     | N-Benzyl-1-phenylmethanamine Hydrochloride                           | 20455-68-9   |
| CP-EL0023     | 2-Isopropylthioxanthone  | 5495-84-1    |
| CP-EL0024     | 2-ethylhexyl formate   | 5460-45-7    |
| CP-EL0025     | Didodecyl 3,3'-Thiodipropionate                                      | 123-28-4     |
| CP-EL0026     | 2-Methyl-4`-(methylthio)-2-morpholinopropiophenone                   | 71868-10-5   |
| CP-EL0027     | 3,5-Di-tert-butylphenol  | 1138-52-9    |
| CP-EL0028     | 3-Methylheptadecane  | 6418-44-6    |
| CP-EL0029     | Methylpentane-3  | 96-14-0      |
| CP-EL0030     | 4,6-Dimethyldodecane   | 61141-72-8   |
| CP-EL0031     | 2-Hydroxy-1-[4-(2-hydroxyethoxy)phenyl]-2-methylpropan-1-one         | 106797-53-9  |
| CP-EL0032     | Decabromodiphenylethane  | 84852-53-9   |
| CP-EL0033     | Dimethylpropyl Phosphonate   | 18755-43-6   |
| CP-EL0034     | Hexamoll   | 166412-78-8  |
| CP-EL0035     | Ethylenebistetra-bromophthalimide                                    | 32588-76-4   |
| CP-EL0036     | 5-Methyloctadecane   | 25117-35-5   |
| CP-EL0037     | 1,6-Hexanediol bis[3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate]  | 35074-77-2   |
| CP-EL0038     | 2,4-Di-tert-butyl-6-(5-chloro-2H-benzotriazol-2-yl)phenol            | 3864-99-1    |
| CP-EL0039     | 8-Hexylpentadecane   | 13475-75-7   |
| CP-EL0040     | 8-Methylheptadecane  | 13287-23-5   |
| CP-EL0041     | Pentadecan-8-one   | 818-23-5     |
| CP-EL0042     | 1-Phenylethanone   | 98-86-2      |
| CP-EL0043     | Drometrizole   | 2440-22-4    |
| CP-EL0044     | 1,4-Dibutyl Benzene-1,4-dicarboxylate                                | 1962-75-0    |
| CP-EL0045     | Bis(2-butoxyethyl) adipate   | 141-18-4     |
| CP-EL0046     | Bis(4-(2-phenylpropan-2-yl)phenyl)amine                              | 10081-67-1   |
| CP-EL0047     | Triphenyl phosphate  | 115-86-6     |
| CP-EL0048     | UV-320   | 3846-71-7    |
| CP-EL0049     | Bis(hydroxyethyl) Terephthalate                                      | 959-26-2     |
| CP-EL0050     | 2,6-Di-tert-butyl-4-methylphenol                                     | 128-37-0     |
| CP-EL0051     | Cyclododecane  | 294-62-2     |
| CP-EL0052     | Di-n-Butyl oxalate   | 2050-60-4    |
| CP-EL0053     | Di(2-ethylhexyl) Sebacate  | 122-62-3     |
| CP-EL0054     | Diisobutyl Carbonate   | 539-92-4     |
| CP-EL0055     | Bis(6-methylheptyl) maleate  | 1330-76-3    |
| CP-EL0056     | Pentaerythritol Dibromide  | 3296-90-0    |
| CP-EL0057     | Diocetyl Methylphosphonate   | 1832-68-4    |
| CP-EL0058     | Tristearin   | 555-43-1     |
| CP-EL0059     | Dodecane   | 112-40-3     |
| CP-EL0060     | Dodecylcyclohexane   | 1795-17-1    |
| CP-EL0061     | Trans-Phytol   | 150-86-7     |
| CP-EL0062     | Diethylene Glycol Dibenzoate   | 120-55-8     |
| CP-EL0063     | Eicosyl Ferulate   | 64190-82-5   |
| CP-EL0064     | Cis-13-Docosenoic Acid   | 112-86-7     |

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|---------------|---|-------------|
| CP-EL0065     | Ethylene Sebacate   | 5578-82-5   |
| CP-EL0066     | Isovaleric Acid   | 503-74-2    |
| CP-EL0067     | 2,6,10-trimethyldodecane  | 3891-98-3   |
| CP-EL0068     | Glyceryl 1-Palmitate  | 542-44-9    |
| CP-EL0069     | 9,10-Dihydro-9-oxa-10-phosphaphenanthrene 10-Oxide  | 35948-25-5  |
| CP-EL0070     | Heneicosane   | 629-94-7    |
| CP-EL0071     | DL-Ethyl Lactate  | 97-64-3     |
| CP-EL0072     | Heptadecane   | 629-78-7    |
| CP-EL0073     | N-Hexacosane  | 630-01-3    |
| CP-EL0074     | Poly(4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol-alt-1,4-butanedioic Acid) (Technical Grade)                        | 65447-77-0  |
| CP-EL0075     | bis(1,2,2,6,6-Pentamethyl-4-piperidyl) Sebacate   | 41556-26-7  |
| CP-EL0076     | N-Hexadecane  | 544-76-3    |
| CP-EL0077     | 1,5,8,12-Tetrakis[4,6-bis(N-butyl-N-1,2,2,6,6-pentamethyl-4-piperidylamino)-1,3,5-triazin-2-yl]-1,5,8,12-tetraazadodecane | 106990-43-6 |
| CP-EL0078     | Tris(4-tert-butyl-3-hydroxy-2,6-dimethylbenzyl) Isocyanurate  | 40601-76-1  |
| CP-EL0079     | Tetrabromobisphenol A   | 79-94-7     |
| CP-EL0080     | 2-Propenoic acid, hexadecyl ester   | 13402-02-3  |
| CP-EL0081     | Triethyl Phosphate  | 78-40-0     |
| CP-EL0082     | 2-Hydroxy-4-(octyloxy)benzophenone  | 1843-05-6   |
| CP-EL0083     | 2-(4,6-Diphenyl-1,3,5-triazine-2-yl)-5-[(hexyl)oxy]phenol   | 147315-50-2 |
| CP-EL0084     | Hexyldecanol  | 2425-77-6   |
| CP-EL0085     | 2-Propenoic acid, 2-methyl-, isooctyl ester   | 28675-80-1  |
| CP-EL0086     | (-)-Isopulegol  | 89-79-2     |
| CP-EL0087     | Decabromodiphenyl Ether   | 1163-19-5   |
| CP-EL0088     | Bumetrizole   | 3896-11-5   |
| CP-EL0089     | Lauramide   | 1120-16-7   |
| CP-EL0090     | 2-(2H-Benzotriazol-2-yl)-4,6-di-tert-pentylphenol   | 25973-55-1  |
| CP-EL0091     | Benzotriazole BT  | 70321-86-7  |
| CP-EL0092     | Lauryl Acrylate   | 2156-97-0   |
| CP-EL0093     | 1,2,4-Trioctyl Ester 1,2,4-Benzenetricarboxylic Acid  | 89-04-3     |
| CP-EL0094     | 4,4'-Bis(1,1,3,3-tetramethylbutyl)diphenylamine   | 15721-78-5  |
| CP-EL0095     | Soybean Oil Epoxide   | 8013-07-8   |
| CP-EL0096     | 1-Octene  | 111-66-0    |
| CP-EL0097     | N,N-Bis(2-hydroxyethyl)dodecanamide   | 120-40-1    |
| CP-EL0098     | Lauryldiethanolamine  | 1541-67-9   |
| CP-EL0099     | Methyl Isobutyl Ketone  | 108-10-1    |
| CP-EL0100     | 1-Methyl-2-pyrrolidone  | 872-50-4    |
| CP-EL0101     | Tetradecanoic Acid  | 544-63-8    |
| CP-EL0102     | N-Ethyl-N-nitrosoethanamine   | 55-18-5     |
| CP-EL0103     | Dibutyl Adipate   | 105-99-7    |
| CP-EL0104     | 1-Decene  | 872-05-9    |
| CP-EL0105     | Bis(2,2,6,6-tetramethyl-4-piperidyl)sebacate  | 52829-07-9  |
| CP-EL0106     | 2-Methyl-4,6-bis(octylsulfanylmethyl)phenol   | 110553-27-0 |
| CP-EL0107     | N-Methyl-N-nitrosomethanamine   | 62-75-9     |
| CP-EL0108     | 1-Nitrosopyrrolidine  | 930-55-2    |
| CP-EL0109     | Naphthalene   | 91-20-3     |
| CP-EL0110     | N-[3-(Dimethyloxidoamino)propyl]-3,3,4,4,5,5,6,6,7,7,8,8,8-tridecafluoro-1-octanesulfonamide                              | 80475-32-7  |
| CP-EL0111     | Trioctyl Trimellitate   | 3319-31-1   |
| CP-EL0112     | N-Nonacosane  | 630-03-5    |
| CP-EL0113     | Tris(2-chloro-1-(chloromethyl)ethyl) phosphate  | 13674-87-8  |
| CP-EL0114     | Triethylene glycol bis(3-tert-butyl-4-hydroxy-5-methylphenyl)propionate   | 36443-68-2  |
| CP-EL0115     | Nonylcyclopropane   | 74663-85-7  |
| CP-EL0116     | N-Octacosane  | 630-02-4    |
| CP-EL0117     | Octadecamethylcyclononasiloxane   | 556-71-8    |
| CP-EL0118     | Orlistat Related Compound C   | 791-28-6    |
| CP-EL0119     | n-Docosane  | 629-97-0    |
| CP-EL0120     | 2-ethylhexyl 4-(dimethylamino)benzoate  | 21245-02-3  |
| CP-EL0121     | N-Pentacosane   | 629-99-2    |
| CP-EL0122     | n-Octadecane  | 593-45-3    |
| CP-EL0123     | Pentaerythritol triacrylate   | 3524-68-3   |
| CP-EL0124     | Di(2-ethylhexyl) phthalate  | 117-81-7    |
| CP-EL0125     | Diazenedicarboxamide  | 123-77-3    |
| CP-EL0126     | 4,4'-Butylidenebis(6-tert-butyl-m-cresol)   | 85-60-9     |
| CP-EL0127     | Probucol  | 23288-49-5  |
| CP-EL0128     | 2-Chlorobenzene   | 108-90-7    |

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|---------------|---|--------------|
| CP-EL0129     | Tertiary Butyl Alcohol                                    | 75-65-0      |
| CP-EL0130     | Adipic acid, bis(2-(2-butoxyethoxy)ethyl) ester           | 141-17-3     |
| CP-EL0131     | N-n-Butylbenzenesulfonamide                               | 3622-84-2    |
| CP-EL0132     | 1-Octadecene  | 112-88-9     |
| CP-EL0133     | Squalene  | 111-02-4     |
| CP-EL0134     | Citric acid, butyryl trihexyl ester                       | 82469-79-2   |
| CP-EL0135     | 1,8-Octanedicarboxylic acid, bis-methyl ester             | 106-79-6     |
| CP-EL0136     | PBT Cyclic Dimer  | 63440-93-7   |
| CP-EL0137     | PBT Cyclic Trimer   | 63440-94-8   |
| CP-EL0138     | PBT Cyclic Tetramer                                       | 29278-72-6   |
| CP-EL0139     | PBT Cyclic Pentamer                                       | 82298-33-7   |
| CP-EL0140     | PBT Impurity 9  | 66885-76-5   |
| CP-EL0141     | Nylon 6,6 Monomer   | 4266-66-4    |
| CP-EL0142     | Nylon 6,6 Dimer   | 4238-35-1    |
| CP-EL0143     | Nylon 6,6 Trimer  | 4174-07-6    |
| CP-EL0144     | 1-Heptadecanecarboxylic acid                              | 57-11-4      |
| CP-EL0145     | Tetracontane  | 4181-95-7    |
| CP-EL0146     | Tetracosane   | 646-31-1     |
| CP-EL0147     | Tetraethylene Glycol Diacrylate                           | 17831-71-9   |
| CP-EL0148     | Triacontyl Acetate  | 41755-58-2   |
| CP-EL0149     | Citric Acid Triethyl Ester                                | 77-93-0      |
| CP-EL0150     | Phenylacetic Acid   | 103-82-2     |
| CP-EL0151     | Di-N-octyl Phthalate                                      | 117-84-0     |
| CP-EL0152     | Diisobutyl phthalate                                      | 84-69-5      |
| CP-EL0153     | Dimethyl Phthalate  | 131-11-3     |
| CP-EL0154     | Dinonyl Phthalate   | 84-76-4      |
| CP-EL0155     | Diphenylamine   | 122-39-4     |
| CP-EL0156     | 1-Docosanol   | 661-19-8     |
| CP-EL0157     | 2-Ethylhexyl Acetate                                      | 103-09-3     |
| CP-EL0158     | Hexadecamethylcyclooctasiloxane                           | 556-68-3     |
| CP-EL0159     | Hexaethylene Glycol                                       | 2615-15-8    |
| CP-EL0160     | Bis(6-methylheptyl) Phthalate                             | 27554-26-3   |
| CP-EL0161     | Isophorone  | 78-59-1      |
| CP-EL0162     | Monobutyl Phthalate                                       | 131-70-4     |
| CP-EL0163     | N-(2-Benzoylphenyl)-4-Methylbenzenesulfonamide            | 1859-71-8    |
| CP-EL0164     | Phenanthrene  | 85-01-8      |
| CP-EL0165     | Oleamide  | 301-02-0     |
| CP-EL0166     | Erucamide   | 112-84-5     |
| CP-EL0167     | Antioxidant 1010  | 6683-19-8    |
| CP-EL0168     | Irganox 3114  | 27676-62-6   |
| CP-EL0169     | 1,2-Dichloroethane  | 107-06-2     |
| CP-EL0170     | Ricinolic Acid  | 141-22-0     |
| CP-EL0171     | 1,1,5,5-Tetramethyl-2-(prop-1-en-2-yl)cyclohexane         | 63251-38-7   |
| CP-EL0172     | Disodium Isophthalate                                     | 2230758-27-5 |
| CP-EL0173     | Tetraethylene Glycol                                      | 112-60-7     |
| CP-EL0174     | 2,4-Diaminotoluene  | 95-80-7      |
| CP-EL0175     | Tris(2,4-di-tert-butylphenyl)phosphate                    | 95906-11-9   |
| CP-EL0176     | 2-Butanone  | 78-93-3      |
| CP-EL0178     | 2-(3-Chloroprop-1-en-2-yl)-1,1,5,5-tetramethylcyclohexane | 63216-72-8   |
| CP-EL0179     | Br-C13 Oligomer Isomer-2                                  | NA           |
| CP-EL0180     | Br-C21 Oligomer Isomer-1                                  | NA           |
| CP-EL0181     | Br-C21 Oligomer Isomer-2                                  | NA           |
| CP-EL0182     | Cl-C13 Oligomer Isomer-2                                  | NA           |
| CP-EL0183     | Cl-C21 Oligomer Isomer-1                                  | NA           |
| CP-EL0184     | Cl-C21 Oligomer Isomer-2                                  | NA           |
| CP-EL0185     | OH-C13 Oligomer Isomer-3                                  | NA           |
| CP-EL0186     | Rubber Oligomer 4   | 2446375-29-5 |
| CP-EL0187     | Rubber Oligomer 5   | 2518227-14-8 |
| CP-EL0188     | Rubber Oligomer 6   | 2514965-51-4 |
| CP-EL0189     | Rubber Oligomer-8   | 2234308-25-7 |
| CP-EL0190     | Rubber Oligomer-9   | NA           |
| CP-EL0191     | Rubber Oligomer 3   | 2512216-71-4 |
| CP-EL0192     | Cis-11-Eicosenamide                                       | 10436-08-5   |
| CP-EL0193     | 2,4-Di-Tert-Butylphenol                                   | 96-76-4      |

| Catalogue no. | Product Name   | Cas no.    |
|---------------|--|------------|
| CP-EL0194     | 1-(3,5-Di-tert-butyl-4-hydroxyphenyl)ethanone                  | 14035-33-7 |
| CP-EL0195     | Bis(2-methoxyethyl) Phthalate                                  | 117-82-8   |
| CP-EL0196     | Butylphenyl Methylpropional                                    | 80-54-6    |
| CP-EL0197     | Citronellyl Propionate   | 141-14-0   |
| CP-EL0198     | Tetradecamethylcycloheptasiloxane                              | 107-50-6   |
| CP-EL0199     | Oleic Acid   | 112-80-1   |
| CP-EL0200     | Palmitic Acid  | 57-10-3    |
| CP-EL0201     | 1,8-Diazacyclotetradecane-2,7-dione (Cyclic Nylon-6,6-monomer) | 4266-66-4  |