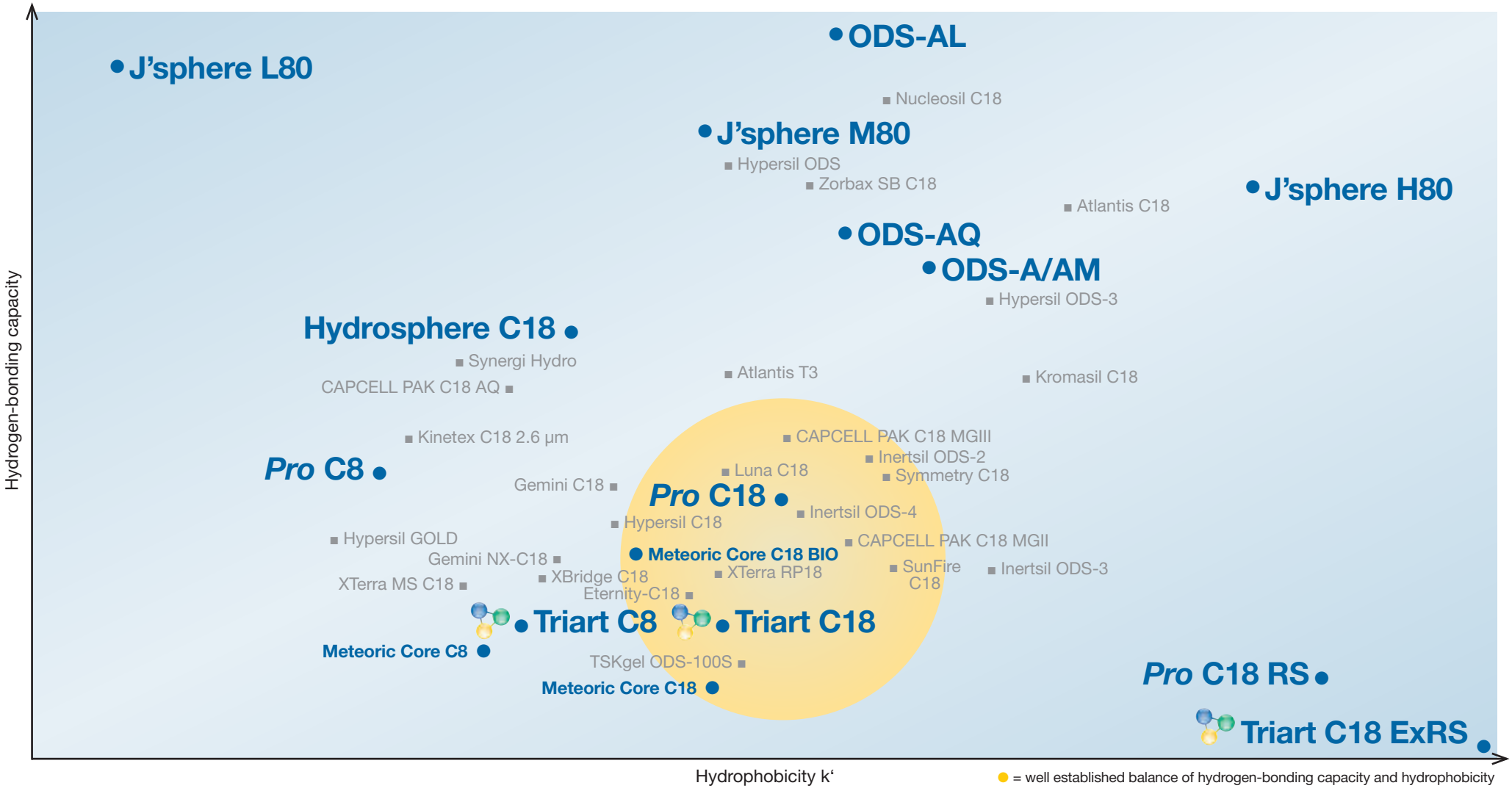
# Analytical stationary phases routinely available from YMC

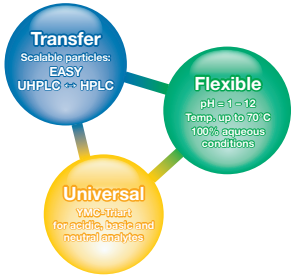
| | | PRODUCT | PHASE (silica-based unless stated) | END-CAPPED | USP CLASS NO. | PARTICLE SIZE (µm spherical) | PORE SIZE (nm) | CARBON LOAD (%C) | pH | TYPICAL APPLICATIONS |
|---|---|---|---|---|---|---|---|---|---|---|
| Reversed Phase | C30 | Carotenoid | proprietary polymeric bonding chemistry | — | L62 | 3, 5 | proprietary | proprietary | 2.0-7.5 | isomeric carotenes, retinols, steroids, fat-soluble vitamins |
| | C18 | Triart C18 ExRS | pH-stable organic/inorganic hybrid particle for steric recognition | yes | L1 | 1.9, 3, 5 | 8 | 25 | 1.0-12.0 | stereoisomers and hydrophobic analytes |
| | | Triart C18 | pH-stable organic/inorganic hybrid particle, 100% aqueous conditions possible | yes | L1 | 1.9, 3, 5 | 12 | 20 | 1.0-12.0 | acidic, neutral, basic compounds, "versatile" stationary phase |
| | | *Pro* C18 | very low residual non-specific interactions | yes | L1 | 3, 5 | 12 | 16 | 2.0-8.0 | antioxidants, metabolites |
| | | UltraHT | 2 µm *Pro* C18 for fast and ultra fast separations | | | 2 | | | | |
| | | *Pro* C18 RS | high carbon load with polymeric bonding C18 | yes | L1 | 3, 5 | 8 | 22 | 1.0-10.0 | acidic and basic compounds |
| | | Hydrosphere C18 | can be used in 100% aqueous eluent | yes | L1 | 3, 5 | 12 | 12 | 2.0-8.0 | strong polar compounds, water-soluble vitamins |
| | | UltraHT | 2 µm Hydrosphere C18 for fast and ultra fast separations | | | 2 | | | | |
| | | Meteoric Core C18 | silica based Core-Shell particle | yes | L1 | 2.7 | 8 | 7 | 1.5-10 | basic, coordinating compounds, fast separations |
| | | Meteoric Core C18 BIO | silica based Core-Shell particle | yes | L1 | 2.7 | 16 | 5 | 1.5-10 | peptides, proteins, fast separations |
| | | ODS-A | one of the YMC's international bestsellers | yes | L1 | 3, 5 | 12, 20, 30 | 17, 12, 7 | 2.0-7.5 | general purpose phase |
| | | ODS-AM | high performance C18 column for validated methods operation | yes | L1 | 3, 5 | 12 | 17 | 2.0-7.5 | purines, phenols, PTC-amino acids, angiotensins, alkaloids |
| | | ODS-AQ | "hydrophilic" endcapping, for 100% aqueous eluent systems | yes | L1 | 3, 5 | 12, 20 | 14, 10 | 2.0-7.5 | strong polar compounds |
| | | J'sphere ODS | C18-family with differently controlled hydrophobicity for method development | yes | L1 | 4 | 8 | 22, 14, 9 (JH, JM, JL) | 1.0-9.0 (JH) 2.0-7.5 (JM+JL) | positional isomers, complexing agents, pharmaceuticals |
| | | ODS-AL | traditional C18 for "mixed mode" separations | no | L1 | 5 | 12 | 17 | 2.0-7.5 | tocopherols, fat-soluble vitamins, disinfectants |
| | | PolymerC18 | polymethacrylate matrix, wide pH applicability | — | — | 6 | proprietary | 10 | 2.0-13.0 | phenols, anilines, quaternary amines |
| | C8 | Triart C8 | pH-stable organic/inorganic hybrid particle | yes | L7 | 1.9, 3, 5 | 12 | 17 | 1.0-12.0 | acidic, neutral, basic and chelating compounds, metabolites, "versatile" stationary phase |
| | | *Pro* C8 | C8, with very low residual non-specific interactions | yes | L7 | 3, 5 | 12 | 10 | 2.0-7.5 | acidic, neutral, basic and chelating compounds, drugs and metabolites |
| | | Meteoric Core C8 | silica based Core-Shell particle | yes | L7 | 2.7 | 8 | 5 | 1.5-9.0 | basic, coordinating compounds, fast separations |
| | | $C_8$ (Octyl) | traditional C8 | yes | L7 | 3, 5 | 12, 20, 30 | 10, 7, 4 | 2.0-7.5 | proteins and peptides, estrogens, general purpose phase |
| | | YMCbasic | monomeric bonded chains of C8 and smaller | — | L7 | 3, 5 | 20 | 7 | 2.0-7.5 | basic molecules w/o modifiers, anilines, alkaloids, antidepressants |
| |  | Ph (Phenyl) | monomeric bonded phenyl | yes | L11 | 3, 5 | 12, 30 | 9, 3 | 2.0-7.5 | phenols, fullerenes, sweeteners |
| | | Triart Phenyl | polymeric bonding phenyl butyl, organic/inorganic hybrid particle | yes | L11 | 1.9, 3, 5 | 12 | 17 | 1.0-10.0 | pharmaceuticals, sweeteners |
| | | Triart PFP | polymeric bonding PFP propyl, organic/inorganic hybrid particle | no | L43 | 1.9, 3, 5 | 12 | 15 | 1.0-8.0 | halogenated and polar compounds |
| | C4 | *Pro* C4 | C4, with very low residual non-specific interactions | yes | L26 | 3, 5 | 12 | 7 | 2.0-7.5 | polar acidic, neutral, basic and chelating compounds, polar peptides |
| | | $C_4$ (Butyl) | traditional C4 | yes | L26 | 3, 5 | 12, 20, 30 | 7, 5, 3 | 2.0-7.5 | biological separations, polar compounds |
| | | Protein-RP | high stability, good recovery rates | — | L26 | 5 | 20 | 4 | 1.5-7.5 | proteins, peptides |
| | | YMC-PAH | proprietary bonding chemistry | — | — | 3, 5 | proprietary | proprietary | 2.0-8.0 | polyaromatic hydrocarbons |
| | | TMS (C1) | trimethyl silane | — | L13 | 3, 5 | 12 | 4 | 2.0-7.5 | water-soluble vitamins |
| Normal Phase / HILIC | | PVA-SIL | polyvinyl alcohol bonded on silica support | — | L24 | 5 | 12 | — | 2.0-9.5 | phospholipids, retinoids, lipids |
| | | Polyamine II | mixed secondary and tertiary amino derivative | — | — | 5 | 12 | — | 2.0-7.5 | malto-oligosaccharides, tocopherols, nucleotides, sugars |
| | | $NH_2$ (Amino) | primary amino derivate | — | L8 | 3, 5 | 12 | — | 2.0-7.5 | sugars, nucleotides, water-soluble vitamins |
| | | CN (Cyano) | useful for SFC applications, can be used in RP mode | yes | L10 | 3, 5 | 12, 30 | 7, 3 | 2.0-7.5 | proteins, steroids, catechols |
| | | Triart-Diol HILIC | versatile HILIC phase, organic/inorganic hybrid particle | — | L20 | 1.9, 3, 5 | 12 | — | 2.0-10.0 | small organic molecules, water-soluble vitamins |
| | | Diol (DN) | versatile alternative to silica for normal phase separations | — | L20 | 5 | 6, 12 | — | 2.0-7.5 | small organic molecules, fat-soluble vitamins, tocopherols |
| | | SIL (Silica) | ultra high purity, high mechanical stability | — | L3 | 3, 5 | 6, 12 | — | 2.0-7.5 | small organic molecules, fat-soluble vitamins, tocopherols |
| IEX | | BioPro QA / SP | high ion exchange capacity, porous hydrophilic polymer | — | — | 5 | 100 | — | 2.0-12.0 | proteins, peptides, nucleotides |
| | | BioPro QA-F / SP-F | high ion exchange capacity, non-porous hydrophilic polymer | — | — | 3, 5 | — | — | 2.0-12.0 | proteins, peptides, nucleotides |
| SEC | | Diol-60, -120, -200, -300 | versatile phase for gel filtration separations | — | L20 | 3, 5 | 6, 12, 20, 30 | — | 5.0-7.5 | peptides, proteins, malto-oligosaccharides |
| Chiral | | Amylose-C | coated derivative [alternative to CHIRALPAK® AD-H, AD-3] | — | L51 | 3, 5 | proprietary | — | — | chiral compounds in NP, SFC modes |
| | | Cellulose-C | coated derivative [alternative to CHIRALCEL® OD-H, OD-3] | — | L40 | 3, 5 | proprietary | — | — | chiral compounds in NP, SFC modes |
| | | Amylose-SA | immobilised derivative [alternative to CHIRALPAK® IA, IA-3] | — | — | 3, 5 | proprietary | — | 2.0-9.0 | *cis-trans* and geometric isomers in NP, RP, SFC modes |
| | | Cellulose-SB | immobilised derivative [alternative to CHIRALPAK® IB, IB-3] | — | — | 3, 5 | proprietary | — | 2.0-9.0 | *cis-trans* and geometric isomers in NP, RP, SFC modes |
| | | Cellulose-SC | immobilised derivative [alternative to CHIRALPAK® IC, IC-3] | — | — | 3, 5 | proprietary | — | 2.0-9.0 | *cis-trans* and geometric isomers in NP, RP, SFC modes |
| | | Amylose-SE | immobilised derivative [alternative to CHIRALPAK® IE, IE-3] | — | — | 3, 5 | proprietary | — | 2.0-9.0 | *cis-trans* and geometric isomers in NP, RP, SFC modes |
| | | NEA (R)(S) | polymeric 1-naphthylethylamine | — | — | 5 | 30 | — | 2.0-6.5 | nonpolar to medium polar optical isomers for NP, RP modes |
| | | α-, β-, γ-CD BR | α-, β-, γ-bromo-cyclodextrin | — | — | 5 | 12 | — | 3.5-6.5 | optical and positional isomers in RP mode |



YMC Europe GmbH · Schöttmannshof 19 · D-46539 Dinslaken · Phone +49 (0) 2064 427-0 · Fax +49 (0) 2064 427-222 · E-Mail: info@ymc.de · www.ymc.de

# YMC – The Selectivity Company




YMC-Triart columns stand for:

- Versatility
- Flexibility in method development
- Long service life = High productivity
- Reproducibility

Column overview analytical 09/2015_EN