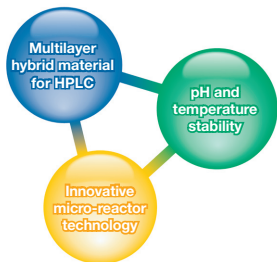
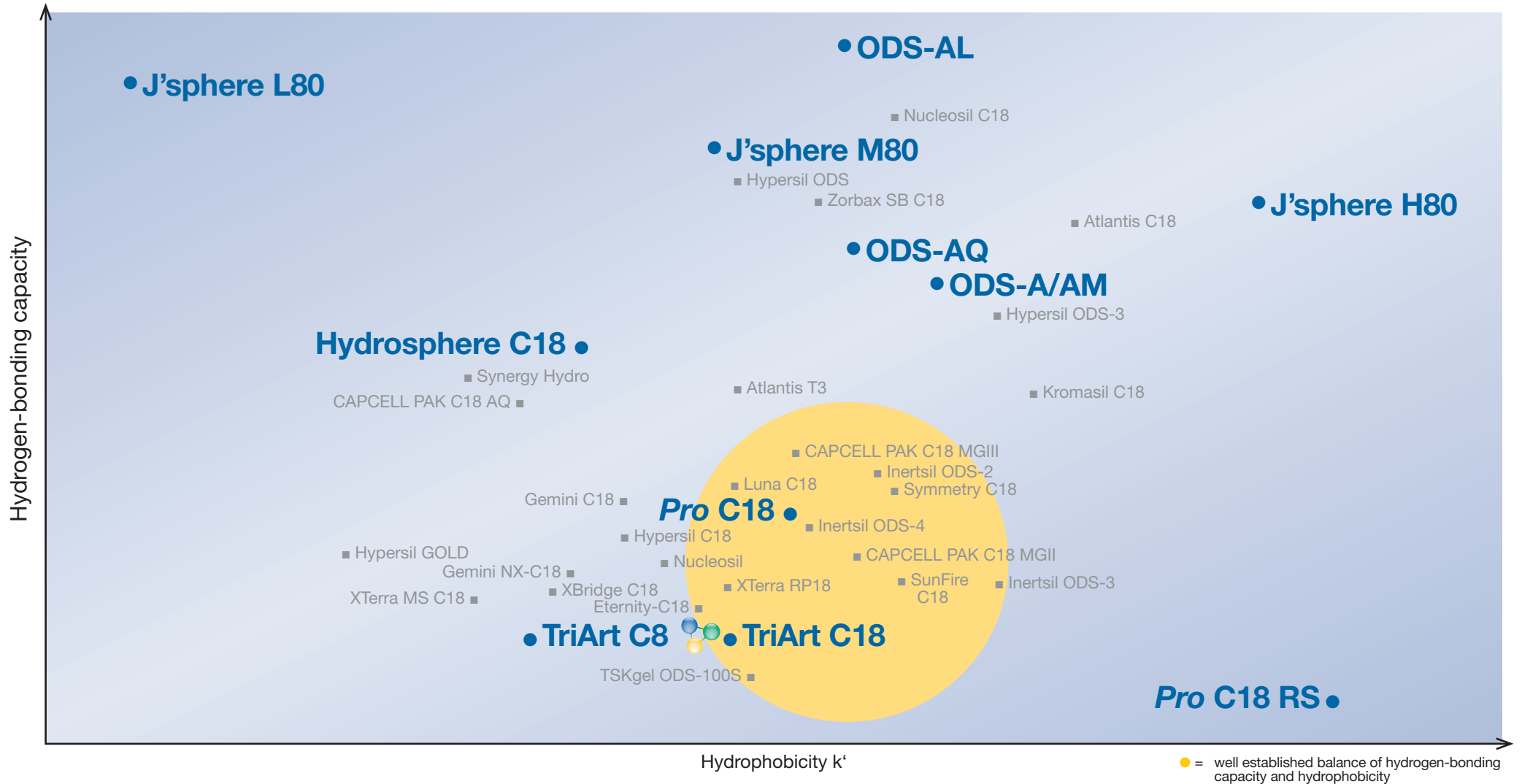


# Analytical stationary phases routinely available from YMC

	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	C30	proprietary polymeric bonding chemistry	—	—	3, 5	proprietary	—	2.0-6.0	isomeric carotenes, retinols, steroids, fat-soluble vitamins
	C18	TriArt C18	multi-layer hybrid particle	yes	L1	1.9, 3, 5	12	12 (20 total)	1.0-12.0	acid, neutral, basic and chelating compounds, metabolites, "versatile" stationary phase
		Pro C18	very low residual non-specific interactions	yes	L1	3, 5	12	17	2.0-8.0	fat-soluble vitamins, antioxidants, metabolites, acidic, neutral, basic and chelating compounds
		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, antibiotics, nucleic acids, water-soluble vitamins, acidic, neutral, basic and chelating compounds
		UltraHT	2 µm Hydrosphere C18 for fast and ultra fast separations			2				
		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	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	3, 5	12	17	2.0-7.5	tocopherols, fat-soluble vitamins, disinfectants	
	Polymer C18	polymethacrylate matrix, wide pH applicability	—	—	6	proprietary	C18 equivalent 10%	2.0-13.0	phenols, anilines, peptides in high pH, pharmaceuticals, quaternary amines	
	C8	TriArt C8	multi-layer hybrid particle	yes	L1	1.9, 3, 5	12	9 (17 total)	1.0-12.0	acid, 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
C8 (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	proprietary	8	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	
C4	Pro C4	C4, with very low residual non-specific interactions	yes	L26	3, 5	12	8	2.0-7.5	polar acidic, neutral, basic and chelating compounds, polar peptides	
	C4 (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	yes	L26	5	proprietary	—	1.5-7.5	proteins, peptides	
	YMC-PAH	proprietary bonding chemistry	—	—	3, 5	—	—	2.0-8.0	polyaromatic hydrocarbons	
Normal Phase / HILIC	TMS (C1)	trimethyl silane	—	L13	3, 5	12, 30	4, 3	2.0-7.5	water-soluble vitamins	
	PVA-SIL	polyvinyl alcohol bonded on silica support	—	L24	5	12	—	2.0-9.5	proteins, phospholipids, retinoids, lipids	
	Polyamine II (PBMM)	mixed secondary and tertiary amino derivative	—	—	5	12	—	2.0-9.0	malto-oligosaccharides, tocopherols, nucleotides, sugars	
	NH <sub>2</sub> (Amino)	primary amino derivate	—	L8	3, 5	12	3	2.0-7.5	sugars, nucleotides, water-soluble vitamins	
	CN (Cyano)	useful for SFC applications	yes	L10	3, 5	12, 30	7, 2.5	2.0-7.5	proteins, steroids, catechols	
	Diol	versatile alternative to silica for normal phase separations	—	L20	5	6, 12	—	2.0-7.5	peptides, proteins, malto-oligosaccharides	
	SIL (Silica)	ultra high purity, high mechanical stability	—	L3	3, 5	6, 12, 20, 30	—	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	—	—	5	—	—	2.0-12.0	proteins, peptides, nucleotides	
SEC	Diol-120	versatile phase for gel filtration separations	—	L20	5	12	—	5.0-7.5	peptides, proteins, malto-oligosaccharides	
	Diol-200	versatile phase for gel filtration separations	—	L20	5	20	—	5.0-7.5	peptides, proteins, malto-oligosaccharides	
	Diol-300	versatile phase for gel filtration separations	—	L20	5	30	—	5.0-7.5	peptides, proteins, malto-oligosaccharides	

# YMC – The Selectivity Company



YMC-TriArt columns stand for:

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

YMC-TriArt hybrid structure

