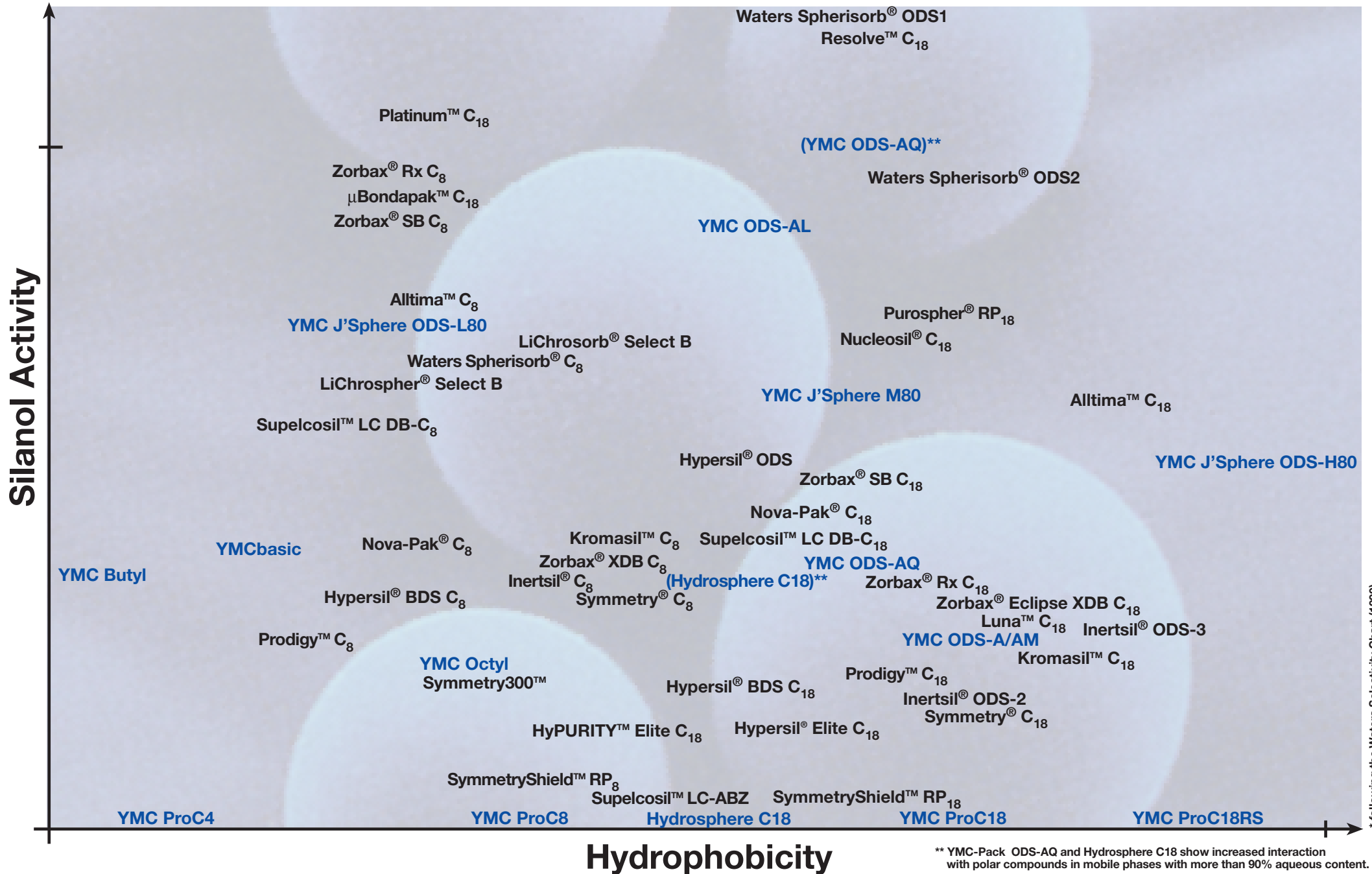


Analytical Stationary Phases Routinely Available from YMC

PRODUCT	CODE	PHASE (silica-based unless noted)	END-CAPPED	USP CLASS NO.	PARTICLE SIZE (µm spherical)	PORE SIZE (Angstroms)	CARBON LOAD (%C)	pH	TYPICAL APPLICATIONS
C30	CT	proprietary polymeric bonding chemistry	no	–	3, 5 ¹	proprietary	–	2-6	isomeric carotenes, retinols, steroids, fat-soluble vitamins
ProC18	AS	latest generation C18 using ultrapure silica base (99.999%), with very low residual non-specific interactions	yes	L1	3, 5 ¹	120	17	2-8	fat-soluble vitamins, antioxidants, metabolites, acidic, neutral, basic and chelating compounds
ProC18RS	RS	high carbon load with polymeric bonding C18, ultrapure silica base (99.999%)	yes	L1	3 ² , 5	80	22	1-10	suitable for a wide range of samples including acidic and basic compounds
Hydrosphere C18	HS	based on the same ultrapure silica base as ProFamily, can be used in 100% aqueous eluent	yes	L1	3, 5	120	12	2-8	strong polar compounds, antibiotics, catecholamines, nucleic acids, water-soluble vitamins, acidic, neutral, basic and chelating compounds
ODS-A	AA	one of YMC's international bestsellers, traditional high performance C18 column	yes	L1	3, 5 ¹	120, 200, 300	17, 12, 6	2-7	pharmaceuticals, vitamins, amino acids, peptides, general purpose phase
ODS-AM	AM	strict QC controlled production provides a high performance C18 column for validated methods operations	yes	L1	3, 5 ¹	120	17	2-7	purines, phenols, PTC-amino acids, angiotensins, alkaloids
ODS-AQ	AQ	"hydrophilic" endcapping, for 100% aqueous eluent systems, substantially increased retention of polar compounds	yes	L1	3, 5 ¹	120, 200	14, 11	2-6.5	strong polar compounds, pharmaceuticals, antibiotics, peptides and proteins, nucleic acids
J'sphere	JH, JM, JL	C18-family with differently controlled hydrophobicity for method development	yes	L1	4	80	22, 14, 9 (JH, JM, JL)	1-9 (H) 2-7 (M+L)	positional isomers, complexing agents, pharmaceuticals
ODS-AL	AL	traditional C18 for "mixed mode" separations	no	L1	3, 5	120	17	2-6	tocopherols, fat-soluble vitamins, disinfectants
Polymer C18	PC	polymethacrylate-matrix, stable towards shrinking and swelling, wide pH applicability	–	–	6, 10 ¹	proprietary	C18 equivalent 10%	2-12	phenols, anilins, peptides in high pH, pharmaceuticals, quaternary amines
ProC8	OS	latest generation C8 using ultrapure silica base (99.999%), with very low residual non-specific interactions	yes	L7	3, 5	120	11	2-8	acidic, neutral, basic and chelating compounds, drugs and metabolites
C8 (Octyl)	OC	traditional C8, high coverage monomeric bonding chemistry	yes	L7	3, 5 ¹	120, 200, 300	10, 7, 4	2-7	proteins and peptides, estrogens, general purpose phase
YMCbasic	BA	monomeric bonded chains of C8 and smaller to give greater surface coverage and lower non-specific interactions	yes	L7	3, 5 ¹	proprietary	8	2-7	basic molecules w/o modifiers, anilines, alkaloids, antidepressants
Phenyl	PH	monomeric bonded phenyl	yes	L11	3, 5 ¹	120, 300	9, 5, 3	2-7	phenols, fullerenes, sweeteners
ProC4	BS	latest generation C4 using ultrapure silica base (99.999%), with very low residual non-specific interactions	yes	L26	3, 5 ¹	120	8	2-8	polar acidic, neutral, basic and chelating compounds, polar peptides
C4 (Butyl)	BU	traditional C4, high coverage monomeric bonding chemistry	yes	L26	3, 5 ¹	120, 200, 300	7, 5, 2.5	2-7	biological separations, polar compounds
Protein RP	PR	specifically designed to withstand exposure to TFA, good recovery rates	yes	L26	5	proprietary	–	1.5-7	proteins, peptides
C1 (TMS) ³	TM	trimethyl silane, excellent hydrolytic stability	yes	L13	3, 5 ¹	120, 300	4, 3.5, 3	2-7	water-soluble vitamins
PVA-SIL ³	PV	polyvinyl alcohol bonded on silica support, suitable for normal or reversed phase applications	yes	L24	5	120	–	2-9.5	proteins, phospholipids, retinoids, lipids
Polyamin II (PBMN)	PB	mixed secondary and tertiary amino derivative gives improved hydrolytic stability and alternative selectivity compared with conventional amino-phases, increased lifetime, rapid equilibration time	yes	–	5	120	–	2-9	malto-oligosaccharides, tocopherols, nucleotides, sugars
Amino ³	NH	primary amino derivative, high coverage monomeric bonding chemistry	yes	L8	3, 5 ¹	120	3, 1.5	2-7	sugars, nucleotides, water-soluble vitamins
Cyano ³	CN	traditional cyano derivative, useful also for SFC applications	yes	L10	3, 5 ¹	120, 300	7, 5, 2.5	2-7	proteins, steroids, catechols
Diol ³	DL	for aqueous GPC or normal phase applications, high recovery for biological material	–	L20	5 ¹	60, 120, 200, 300	–	2-7	peptides, proteins, malto-oligosaccharides
Silica	SL	ultra high purity, high mechanical stability	–	L3	3, 5 ¹	60, 120, 200, 300	–	n.a.	small organic molecules, fat-soluble vitamins, tocopherols

¹ preparative grades routinely available (others on request); ² available 2003; ³ when ordering please specify normal or reversed phase

YMC Phase Selection Guide*



** YMC-Pack ODS-AQ and Hydrosphere C18 show increased interaction with polar compounds in mobile phases with more than 90% aqueous content.