## **Bulk Packing Material for Preparative Chromatography**

PHASE		PRODUCT	PHASE CODE	PHASE (Silica-based unless noted)	PORE SIZE* (nm)	PARTICLE SIZE* (µm spherical)	CARBON LOAD** (%C)	рН	TYPICAL APPLICATION	
	C18	Triart Prep C18	TAS	organic/inorganic hybrid particle, polymeric bonding	12; (20)	10; 15; 20	20	2.0-10.0	first choice for method development, most versatile phase	
Reversed Phase		ODS-A-HG	AAG	one of YMC's international bestsellers, traditional high performance C18 silica	12; 20; 30	10; 15; 20; 50	17; 12; 7	2.0-7.5	pharmaceuticals, vitamins, peptides, PTC-amino acids, general purpose phase	
		ODS-AQ-HG	AQG	"hydrophilic" endcapping, for 100% aqueous eluent systems, substantially increased retention of polar compounds	8; 12; 20	10; 15; 20; 50	15; 14; 10	2.0-7.5	strong polar compounds, pharmaceuticals, antibiotics, peptides and proteins, nucleic acids, amino acids and nucleotides	
		Triart Prep C8	TOS	organic/inorganic hybrid particle, polymeric bonding	(12); 20	10; 15; 20	13	2.0-10.0	proteins and peptides, general purpose phase	
	83	C8-HG (Octyl)	OCG	G traditional C8, high coverage monomeric bonding chemistry		10; 15; 20; 50	10; 7; 4	2.0-7.5	proteins and peptides, estrogens, general purpose phase	
		YMCbasic	BA	specifically designed for the separation of basic compounds and peptides		10; 15	7	2.0-7.5	basic molecules w/o modifiers, peptides	
Reve		Ph-HG (Phenyl)	PHG	monomerically bonded phenyl, the $\pi-\pi$ electron interaction gives a separation selectivity different from ODS	12; (20; 30)	10; 15; 20; 50	9	2.0-7.5	phenols, fullerenes, sweeteners, aromatics	
	2	C4-HG (Butyl)	BUG	traditional C4, less hydrophobic surface structure than C8 packing material	12; 20; 30	10; 15; 20; 50	7; 5; 3	2.0-7.5	biological separations, polar compounds, proteins	
	C1	TMS-HG (C1) TMG trimethylsilane bonding, excellent hydrolytic stability		12; (20; 30)	10; 15; 20; 50	4	2.0-7.5	water-soluble vitamins		
		YMC Omega	OMG	specifically designed for the separation of polyunsaturated fatty acids		10; 20; 50	15	2.0-7.5	polyunsaturated fatty acids, EPA, DHA	
7)		NH2-HG (Amino)	NHG	primary amino derivative, high coverage monomeric bonding chemistry, suitable for HILIC	12; (20; 30)	10; 15; 20; 50	3	2.0-7.5	saccharides, nucleotides, water-soluble vitamins	
nal ILIC		CN-HG (Cyano)	CNG	for RP and NP applications, useful also for SFC and HILIC	12; (20; 30)	10; 15; 20; 50	7	2.0-7.5	proteins, steroids, catechols, for SFC applications	
Normal Phase/HILIC		Diol-HG	DNG	for normal phase applications, high recovery for biological material, suitable for HILIC and SFC	12; 20; 30	10; 15; 20; 50	-	2.0-7.5	polar natural products, pharmaceuticals, for HILIC and SFC applications	
Pha		SIL-HG (Silica)	SLG	ultra high purity, high mechanical stability, suitable for HILIC and SFC	6; 8; 12; 20; 30	10; 15; 20; 50	-	-	small organic molecules, fat-soluble vitamins, tocopherols, steroids	
		SIL (Silica)	SL	high purity, suitable for MPLC and column chromatography	6; 12	50; 75; 150	-	-	small organic molecules, fat-soluble vitamins, tocopherols, steroids	
7)		Diol-120	DLG	versatile phase for gel filtration separations	12	10; 15; 20; 50	-	5.0-7.5	peptides, proteins, malto-oligosacchardes, MW 5,000 to 100,000	
SEC		Diol-200	DLG	versatile phase for gel filtration separations	20	10; 15; 20	-	5.0-7.5	peptides, proteins, malto-oligosacchardes, MW 10,000 to several 100,000	
		Diol-300	DLG	versatile phase for gel filtration separations	30	10; 15; 20	-	5.0-7.5	peptides, proteins, malto-oligosacchardes, MW several 10,000 to 1,000,000	
		Chiral Amylose-C	KAN	polysaccharide chiral selector, coated type	proprietary	10; 20	-	-	wide application range, SFC/SMB	
		Chiral Cellulose-C	KCN	polysaccharide chiral selector, coated type	proprietary	10; 20	-	-	wide application range, SFC/SMB	
a		Chiral Amylose-SA	KSA	polysaccharide chiral selector, immobilised type	proprietary	10; 20	-	2.0-9.0	wide application range for RP, NP, SFC and SMB	
Chiral		Chiral Cellulose-SB	KSB	polysaccharide chiral selector, immobilised type	proprietary	10; 20	-	2.0-9.0	wide application range for RP, NP, SFC and SMB	
$\Box$		Chiral Cellulose-SC Chiral Cellulose-SJ	KSC KSJ	polysaccharide chiral selector, immobilised type	proprietary	10; 20 10; 20	-	2.0-9.0	wide application range for RP, NP, SFC and SMB	
		Chiral Prep CD ST	ST	polysaccharide chiral selector, immobilised type cyclodextrin based stationary phase for chiral RP separations	proprietary 12	10, 20	_	2.0-7.0	wide application range for RP, NP, SFC and SMB chiral separations, structural isomers	
		Chiral Prep CD PM	PM	phenyl modified cyclodextrin based phase, for NP and RP applications	12	10; 20; 50	_	2.0-7.0	chiral separations, structural isomers	
		BioPro Q	QA	high dynamic binding capacity, hydrophilic polymer strong anion exchange media	porous	75	-	2.0-12.0	monoclonal antibodies, proteins, IgG	
		BioPro S	SP	high dynamic binding capacity, hydrophilic polymer strong cation exchange media	porous	75	-	2.0-12.0	monoclonal antibodies, proteins, IgG	
Ä		BioPro SmartSep Q	QS	high mechanical strength, hydrophilic polymer anion exchange media	porous	10; 20; 30	-	2.0-12.0	nucleic acid, antibody pharmaceuticals, and general peptides/proteins	
ш		BioPro SmartSep S	SS	high mechanical strength, hydrophilic polymer cation exchange media	porous	10; 20; 30	-	2.0-12.0	insulin, antibody pharmaceuticals, and general peptides/proteins	
		BioPro DA	DAM	high dynamic binding capacity, hydrophilic polymer weak anion exchange media	porous	60	-	3.0-12.0	monoclonal antibodies, proteins, IgG, general peptides/proteins	
		BioPro CM	CMM	high dynamic binding capacity, hydrophilic polymer weak cation exchange media	porous	60	=	3.0-12.0	monoclonal antibodies, proteins, IgG, general peptides/proteins	

Analytical grades (3 and 5 µm) are routinely available in pre-packed columns. Particle sizes as indicated. If not listed, please ask for quotation. Multi ton capacity. Customized packing materials available on request. Pore sizes in parenthesis on request. \*Not all combinations available. \*\*With respect to pore size.



## **Scale Up Assistance**

## **Choose Best Selectivity**

Analyte Solubility	Separation Mechanism	Functional Group	YMC Product	Application	
			Triart Prep C18-S	versatile phase, stable over large pH range	
		C18	ODS-A-HG	derivatized amino acids, dyes, peptides, polar compounds	
			ODS-AQ-HG	nucleotides, oligonucleotides, peptides, vitamins, highly polar and ionic compounds	
	Reversed Phase	C8	Triart Prep C8-S	peptides, small proteins, phase stable over large pH range	
	Neverseu Fliase		YMCbasic	derivatized amino acids, organic amines, basic drugs, metabolites, peptides	
Water soluble			C8-HG (Octyl)	peptides, proteins	
		C4 C4-HG (Butyl) peptides, vitamins		peptides, vitamins	
		C1	TMS-HG	vitamins	
	HILIC	NH <sub>2</sub>	NH2-HG (Amino)	cabohydrates, sugars, nucleotides	
	HILIC	Diol	Diol-HG	oligosaccharides, peptides, proteins	
	Size Exclusion	Diol	Diol-HG	peptides	
	Ion-Pairing Ion- Suppresion	C18	Triart Prep C18-S	versatile phase, stable over large pH range	
		C18	Triart Prep C18-S	versatile phase, stable over large pH range	
		C16	ODS-A-HG	fat-soluble vitamins, carotenoids	
	Reversed Phase	C8	Triart Prep C8-S	peptides, small proteins, phase stable over large pH range	
Non-water soluble		Co	C8-HG (Octyl)	aflatoxins, fatty acids, polyaromatics, estrogens	
Organic solvent soluble		Phenyl	Ph-HG (Phenyl)	fatty acids, polyaromatics, medium polar compounds	
Organio solvent solubie		SIL	SIL-HG	fat-soluble vitamins, organic compounds, estrogens	
	Normal Phase	Diol	Diol-HG	steroids, triglycerides, vitamins	
	INOITIAI FIIASE	CN	CN-HG (Cyano)	steroids, proteins	
		NH <sub>2</sub>	NH2-HG (Amino)	steroids, aromatic alcohols	