YMC-Triart Columns





YMC-Triart is based on organic/inorganic hybrid particles. The particle combines the high mechanical stability and high efficiency of a silica-based packing material with the high chemical stability of a polymer-based packing material. The granulation process utilizing microreactor technology enables continuous and highly controlled production of hybrid particles. The particle's uniform pore size distribution, smooth surface, and uniform particle size greatly contribute to excellent peak shape and separation reproducibility.

Aside from Triart SIL, all Triart phases are trifunctionally bonded.

YMC-Triart Phases

Product	Functional Group/ USP Class	Particle Size (μm)	Pore Size (Å)	Carbon Load	End-capping	Recommended Limits		Part #s
						pH Range	Temperature*	start with
Triart C18	C18 / L1	1.9, 3, 5	120	20 %	Multi-stage	1-12	pH 1-7: 90 °C pH 7-12: 50 °C	TA12
Triart Prep C18-S		7, 10, 15, 20				2-10**		TAS
Triart C18 ExRS	C18 / L1	1.9, 3, 5	80	25 %	Multi-stage	1-12	pH 1-7: 90 °C pH 7-12: 50 °C	TAR08
Triart Bio C18	C18 / L1	1.9, 3, 5	300	-	Multi-stage	1-12	pH 1-9: 90 °C pH 9-12: 50 °C	TA30
Triart C8	C8 / L7	1.9, 3, 5	120	17 %	Multi-stage	1-12	pH 1-7: 90 °C pH 7-12: 50 °C	T012
Triart Prep C8-S		10, 15, 20	120, 200			2-10**		TOS
Triart Prep Bio200 C8	C8 / L7	10	200	14 %	Multi-stage	2-10**		ТОВ
Triart Phenyl	phenylbutyl / L11	1.9, 3, 5	120	17 %	Multi-stage	1-10	50 °C	TPH12
Triart Prep Phenyl-S		10				2-10**		TPS
Triart Bio C4	C4 (butyl) / L26	1.9, 3, 5	300	-	Multi-stage	1-10	pH 1-7: 90 °C pH 7-10: 50 °C	TB30
Triart Prep C4-S	C4 (butyl) / L26	10	120	14 %	Multi-stage	2-10**		TBS
Triart PFP	pentafluoro- phenylpropyl / L43	1.9, 3, 5	120	15 %	None	1-8	50 °C	TPF12
Triart Diol-HILIC	dihydroxypropyl / L20	1.9, 3, 5	120	12 %	None	2-10	50 °C	TDH12
Triart SIL	bare silica / L3	3, 5	120		None	2-8	50 °C	TS12
Triart Prep SIL		10, 15, 20	120	_				TSS

^{*}Recommended temperature range for normal use of all Triart chemistries: 20-40 °C

▲ = 100% aqueous stable (no phase de-wetting for RP)



Available hardware types:

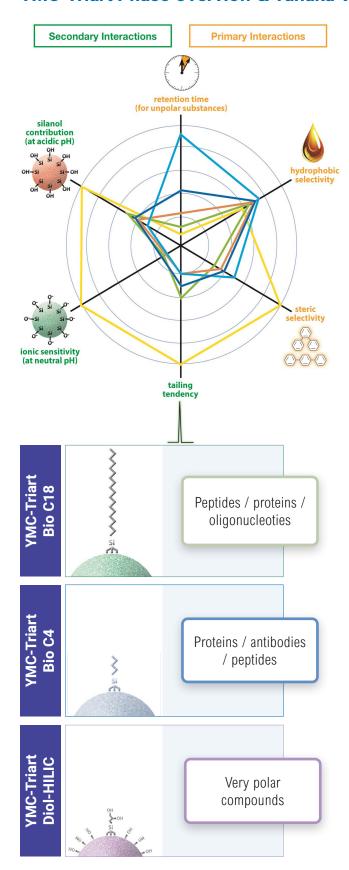
Stainless steel part numbers end in PT, PTH, or WT

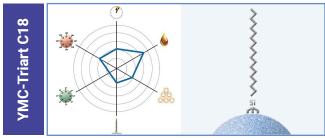
Accura Triart bioinert frit and column body through CVD coating-part numbers end in PTC

PEEK-linked stainless steel-part numbers end in PTP

^{**} up to pH 12 for column cleaning

YMC-Triart Phase Overview & Tanaka Values

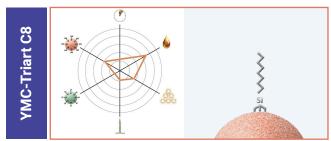




· first choice for method development



· isomers and structural analogs



• alternative to C18 short retention time



- aromatic compounds (π-electron donor)
- · conjugated systems



- aromatic compounds (π-electron donor)
- · cis-trans isomers
- polar /halogenated compounds



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