

YMC-Triart

Versatile hybrid silica based (U)HPLC columns

YMC

EUROPE GMBH

The Selectivity Company

NEW
Triart Phenyl
Triart PFP

Transfer

Scalable particles:
EASY
UHPLC ↔ HPLC

Flexible

YMC-Triart:
pH 1-12 (C18/C8)
Temperatures
up to 70°C

Universal

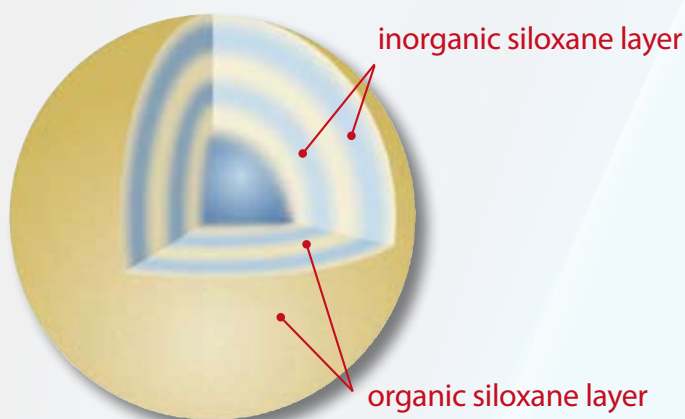
YMC-Triart
for acidic, basic and
neutral analytes

www.ymc.de

Particle technology

YMC-Triart is a multi-layered material prepared using tightly controlled particle formation technology which has been adapted from micro-reactor technology. This recently developed production process results in exceptionally narrow particle and pore size distributions. With YMC-Triart, challenging pH and high temperature conditions are no longer a limitation to the day-to-day work in laboratories. Most importantly, due to its unique particle composition, a balanced hydrophobicity and silanol activity are achieved which makes YMC-Triart a "First Choice" column in method development.

YMC-Triart hybrid structure



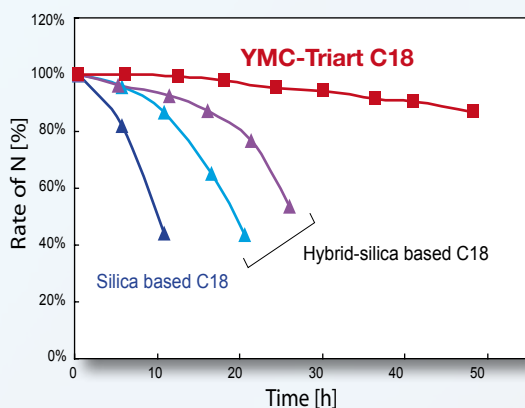
Specification

	YMC-Triart C18	YMC-Triart C8	Triart Phenyl	Triart PFP	YMC-Triart Diol-HILIC
Base	organic/inorganic silica				
Stationary phase	C18 (as USP L1)	C8 (as USP L7)	Phenyl (USP L11)	Pentafluorophenyl (USP L43)	Diol (USP L20)
Particle size	1.9, 3 and 5 μm				
Pore size	12 nm				
Bonding	polymeric type	polymeric type	—	—	—
End-capping	multi-stage hybrid groups	multi-stage hybrid groups	multi-stage hybrid groups	—	—
pH range	1 ~ 12	1 ~ 12	1 ~ 10	1 ~ 8	2 ~ 10
Temperature range	pH 1-7: 70 °C, pH 7-12: 50 °C	pH 1-7: 70 °C, pH 7-12: 50 °C	50 °C	50 °C	50 °C

pH & temperature

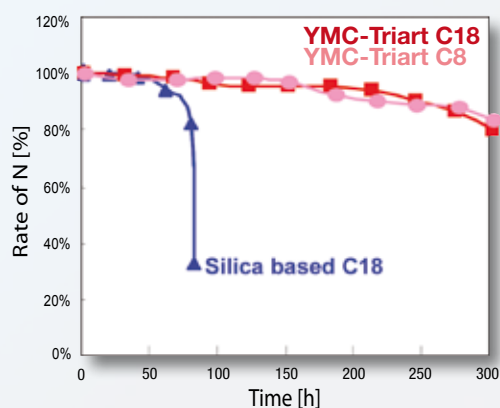
Versatile wide pH stability

Phosphate buffer (pH 11.5, 40 °C)



Column: 5 μ m, 150 x 4.6 mm ID
 Part-No.: TA12S05-1546PT
 Eluent: 50 mM K_2HPO_4 - K_3PO_4 (pH 11.5) / methanol (90/10)
 Flow rate: 1.0 ml/min
 Sample: benzyl alcohol

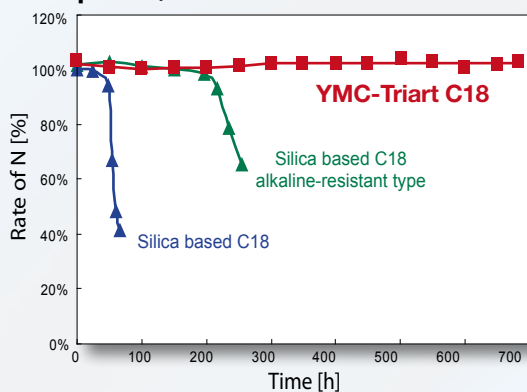
Triethylamine (pH 11.5, 40 °C)



Column: 5 μ m, 150 x 4.6 mm ID
 Part-No.: TA12S05-1546PT
 Eluent: 50 mM triethylamine (pH 11.5) / methanol (90/10)
 Flow rate: 1.0 ml/min
 Sample: benzyl alcohol

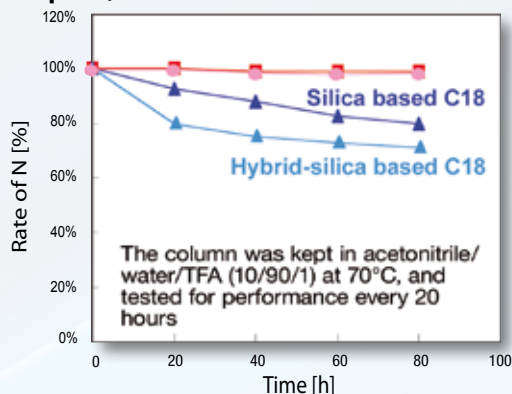
Durability at high temperature

pH 6.9, 70 °C



Column: 5 μ m, 50 x 2.0 mm ID
 Part-No.: TA12S05-0502PT
 Eluent: 20 mM KH_2PO_4 - K_2HPO_4 (pH 6.9) / acetonitrile (90/10)
 Flow rate: 0.2 ml/min
 Temperature: 70 °C
 Sample: phenol

pH 1, 70 °C



Column: 5 μ m, 50 x 2.0 mm ID
 Part-No.: TA12S05-0502PT
 Eluent: acetonitrile / water (60/40)
 Flow rate: 0.2 ml/min
 Temperature: 70 °C
 Sample: butyl benzoate

YMC-Triart phases show great chemical stability due to the newly developed hybrid-silica. Even under high pH or high temperature conditions, the lifetime of YMC-Triart phases is more than 10x greater than conventional reversed phase columns.

Application Data by courtesy YMC Co., Ltd.

Ordering information

YMC-Triart 1.9 µm UHPLC columns

Phase	Column ID (mm)	Column length (mm)					Guard cartridges* with 5 mm length (pack of 3)
		30	50	75	100	150	
C18	2.0	TA12SP9-0302PT	TA12SP9-0502PT	TA12SP9-L502PT	TA12SP9-1002PT	TA12SP9-1502PT	TA12SP9-E5Q1CC
	3.0	—	TA12SP9-0503PT	TA12SP9-L503PT	TA12SP9-1003PT	TA12SP9-1503PT	TA12SP9-E503CC
C8	2.0	TO12SP9-0302PT	TO12SP9-0502PT	TO12SP9-L502PT	TO12SP9-1002PT	TO12SP9-1502PT	TO12SP9-E5Q1CC
	3.0	—	TO12SP9-0503PT	TO12SP9-L503PT	TO12SP9-1003PT	TO12SP9-1503PT	TO12SP9-E503CC
Phenyl	2.0	—	TPH12SP9-0502PT	—	TPH12SP9-1002PT	—	TPH12SP9-E5Q1CC
	3.0	—	—	—	—	—	TPH12SP9-E503CC
PPF	2.0	—	TPF12SP9-0502PT	—	TPF12SP9-1002PT	—	TPF12SP9-E5Q1CC
	3.0	—	—	—	—	—	TPF12SP9-E503CC
HILIC	2.0	—	TDH12SP9-0502PT	—	TDH12SP9-1002PT	—	TDH12SP9-E5Q1CC
	3.0	—	TDH12SP9-0503PT	—	TDH12SP9-1003PT	—	TDH12SP9-E503CC

*Guard cartridge holder required, part no. XPCHUHP

YMC-Triart 3 µm analytical columns

Phase	Column ID (mm)	Column length (mm)					Guard cartridges* with 10 mm length (pack of 5)
		50	75	100	150	250	
C18	2.0	TA12S03-0502WT	TA12S03-L502WT	TA12S03-1002WT	TA12S03-1502WT	—	TA12S03-01Q1GC
	3.0	TA12S03-0503WT	TA12S03-L503WT	TA12S03-1003WT	TA12S03-1503WT	—	TA12S03-0103GC
	4.6	TA12S03-0546WT	TA12S03-L546WT	TA12S03-1046WT	TA12S03-1546WT	TA12S03-2546WT	TA12S03-0104GC
C8	2.0	TO12S03-0502WT	TO12S03-L502WT	TO12S03-1002WT	TO12S03-1502WT	—	TO12S03-01Q1GC
	3.0	TO12S03-0503WT	TO12S03-L503WT	TO12S03-1003WT	TO12S03-1503WT	—	TO12S03-0103GC
	4.6	TO12S03-0546WT	TO12S03-L546WT	TO12S03-1046WT	TO12S03-1546WT	TO12S03-2546WT	TO12S03-0104GC
Phenyl	2.0	TPH12S03-0502WT	—	—	TPH12S03-1502WT	—	TPH12S03-01Q1GC
	3.0	—	—	TPH12S03-1003WT	TPH12S03-1503WT	—	TPH12S03-0103GC
	4.6	TPH12S03-0546WT	TPH12S03-L546WT	TPH12S03-1046WT	TPH12S03-1546WT	—	TPH12S03-0104GC
PPF	2.0	TPF12S03-0502WT	—	—	TPF12S03-1502WT	—	TPF12S03-01Q1GC
	3.0	—	—	TPF12S03-1003WT	TPF12S03-1503WT	—	TPF12S03-0103GC
	4.6	TPF12S03-0546WT	TPF12S03-L546WT	TPF12S03-1046WT	TPF12S03-1546WT	—	TPF12S03-0104GC
HILIC	2.0	TDH12S03-0502WT	—	TDH12S03-1002WT	TDH12S03-1502WT	—	TDH12S03-01Q1GC
	3.0	TDH12S03-0503WT	—	TDH12S03-1003WT	TDH12S03-1503WT	—	TDH12S03-0103GC
	4.6	—	—	TDH12S03-1046WT	TDH12S03-1546WT	—	TDH12S03-0104GC

*Guard cartridge holder required, part no. XPGCH-Q1

YMC-Triart 5 µm analytical columns

Phase	Column ID (mm)	Column length (mm)					Guard cartridges* with 10 mm length (pack of 5)
		50	75	100	150	250	
C18	2.0	TA12S05-0502WT	TA12S05-L502WT	TA12S05-1002WT	TA12S05-1502WT	—	TA12S05-01Q1GC
	3.0	TA12S05-0503WT	TA12S05-L503WT	TA12S05-1003WT	TA12S05-1503WT	—	TA12S05-0103GC
	4.6	TA12S05-0546WT	TA12S05-L546WT	TA12S05-1046WT	TA12S05-1546WT	TA12S05-2546WT	TA12S05-0104GC
C8	2.0	TO12S05-0502WT	TO12S05-L502WT	TO12S05-1002WT	TO12S05-1502WT	—	TO12S05-01Q1GC
	3.0	TO12S05-0503WT	TO12S05-L503WT	TO12S05-1003WT	TO12S05-1503WT	—	TO12S05-0103GC
	4.6	TO12S05-0546WT	TO12S05-L546WT	TO12S05-1046WT	TO12S05-1546WT	TO12S05-2546WT	TO12S05-0104GC
Phenyl	2.0	—	—	—	TPH12S05-1502WT	—	TPH12S05-01Q1GC
	3.0	TPH12S05-0503WT	—	—	—	—	TPH12S05-0103GC
	4.6	TPH12S05-0546WT	—	TPH12S05-1046WT	TPH12S05-1546WT	TPH12S05-2546WT	TPH12S05-0104GC
PPF	2.0	—	—	—	TPF12S05-1502WT	—	TPF12S05-01Q1GC
	3.0	TPF12S05-0503WT	—	—	—	—	TPF12S05-0103GC
	4.6	TPF12S05-0546WT	—	TPF12S05-1046WT	TPF12S05-1546WT	TPF12S05-2546WT	TPF12S05-0104GC
HILIC	2.0	—	—	—	TDH12S05-1502WT	—	TDH12S05-01Q1GC
	3.0	—	—	—	TDH12S05-1503WT	—	TDH12S05-0103GC
	4.6	—	—	—	TDH12S05-1546WT	TDH12S05-2546WT	TDH12S05-0104GC

*Guard cartridge holder required, part no. XPGCH-Q1

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