

# Fast and high sensitivity UHPLC/MS columns

## 1 mm YMC-Triart

**YMC**  
EUROPE GMBH  
The Selectivity Company

### Ideal choice for

- Low sensitivity compounds
- Low sample amounts
- High sensitivity LC/MS analyses
- Peptides / peptide mapping
- Oligonucleotides

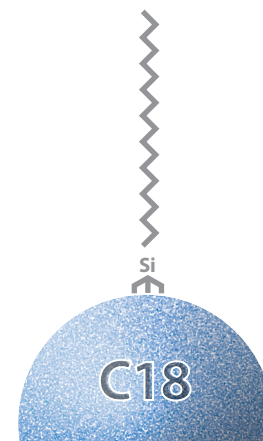
### Features

- High performance 1 mm UHPLC columns
- High precision column hardware for reliable results
- Highly reproducible YMC-Triart phases in highly reproducible hardware
- Excellent peak shapes for high sensitivity LC-MS analyses
- Bringing MicroLC and UHPLC advantages together

### Specifications

Particle size	1.9 µm
Pore size	12 nm
Modification	Trifunctional
Base particle	Organic/inorganic hybrid silica
pH range	1–12
Temperature range	pH < 7: 90 °C pH > 7: 50 °C
Pressure limit	100 MPa / 15,000 psi

### YMC-Triart C18



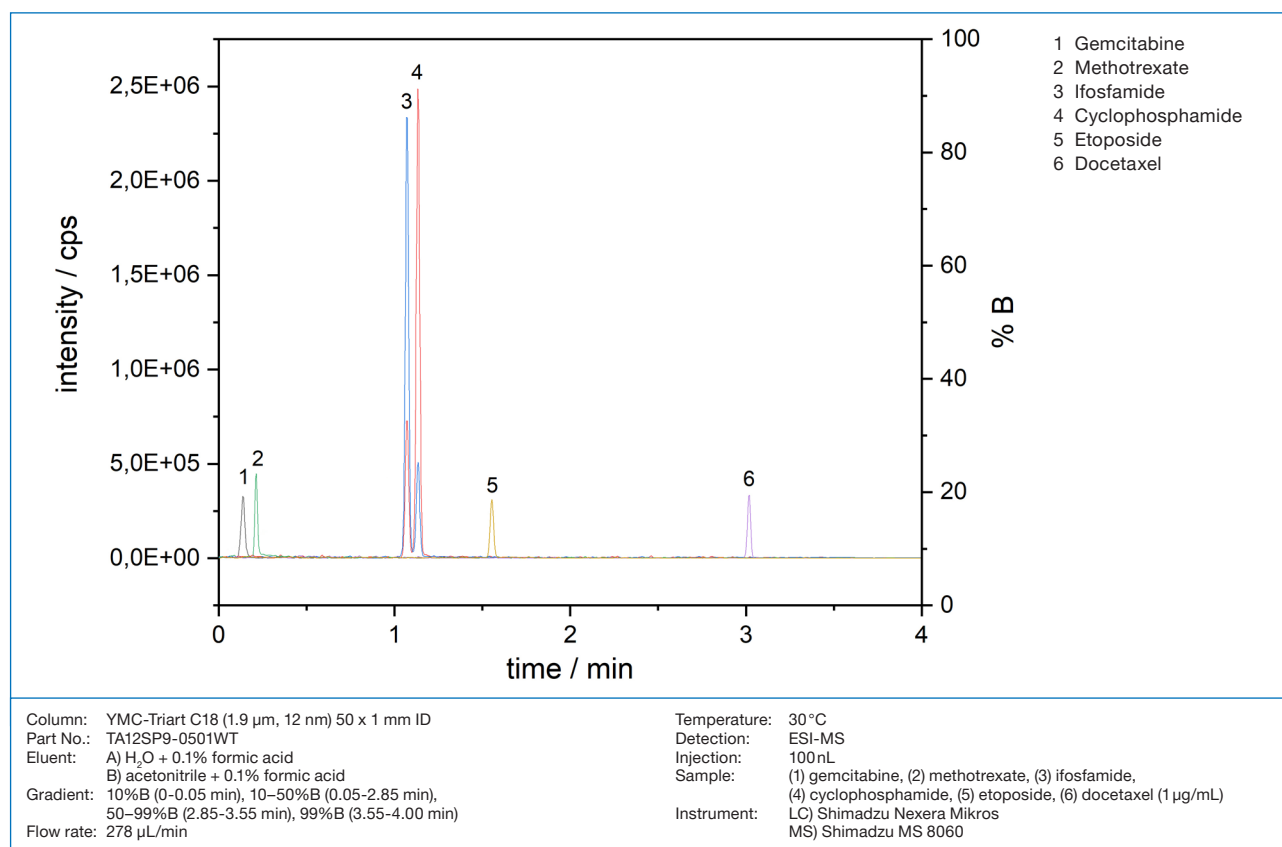
versatile applications

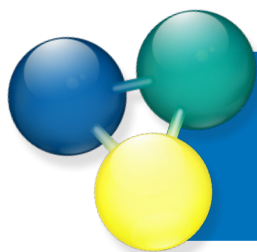
first choice for  
method development

pH 1–12/90 °C max.

100% aqueous eluents

### Ideal choice for high sensitivity screenings



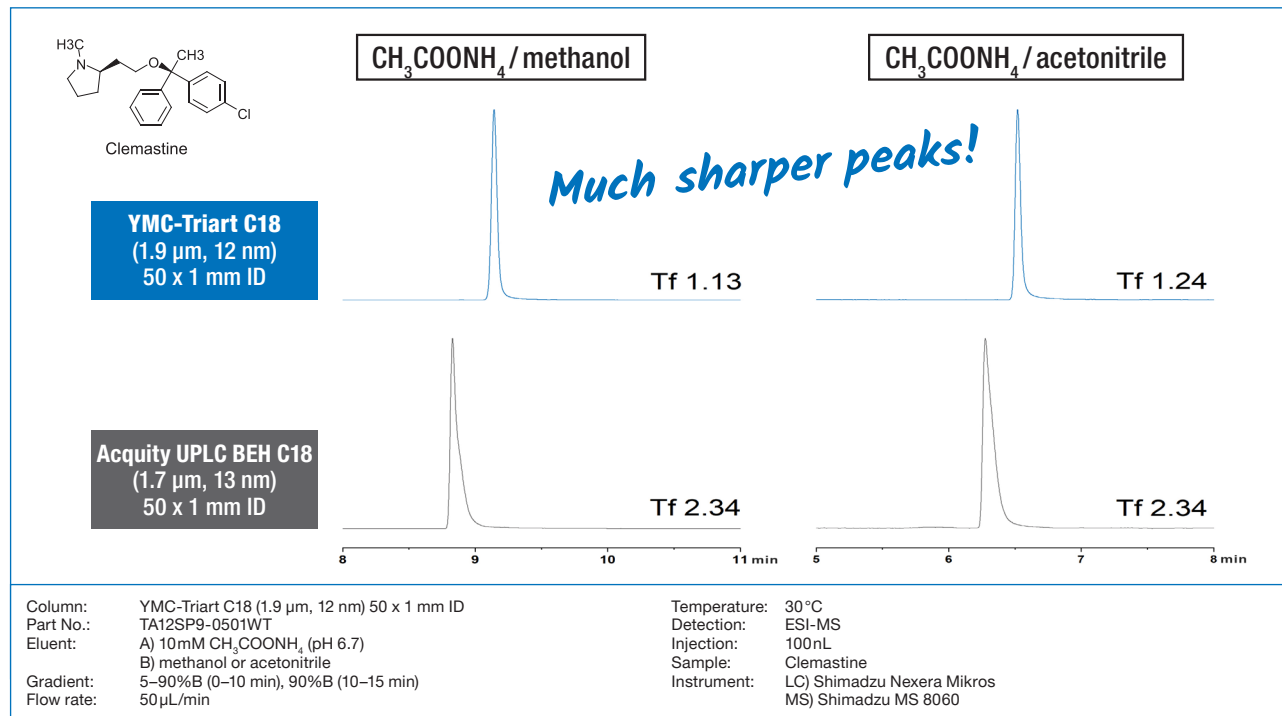


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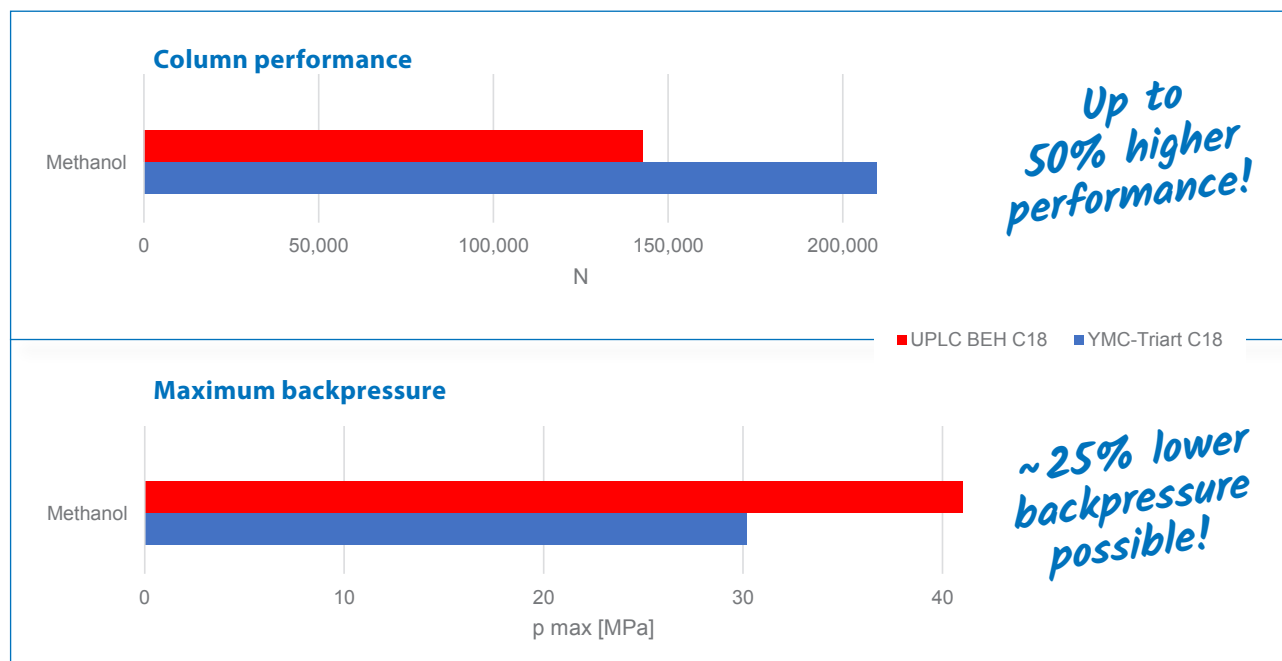
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### Excellent peak shapes for challenging basic compounds



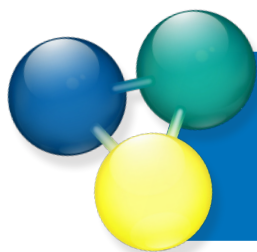
The well-known basic compound clemastine generally exhibits peak tailing. The YMC-Triart column shows sharp peaks using both organic modifiers, while an alternative column shows much higher tailing factors.

### High performance and low back pressures



Application data by courtesy of: Tobias Werres, IUTA - Institut für Energie- und Umwelttechnik e.V., Duisburg, Germany.

The 1 mm YMC-Triart UHPLC column shows up to 50% higher performance together with a remarkably lower back pressure compared to the competitor column. This demonstrates the higher packing quality of the YMC-Triart column as well as the narrow particle size distribution.

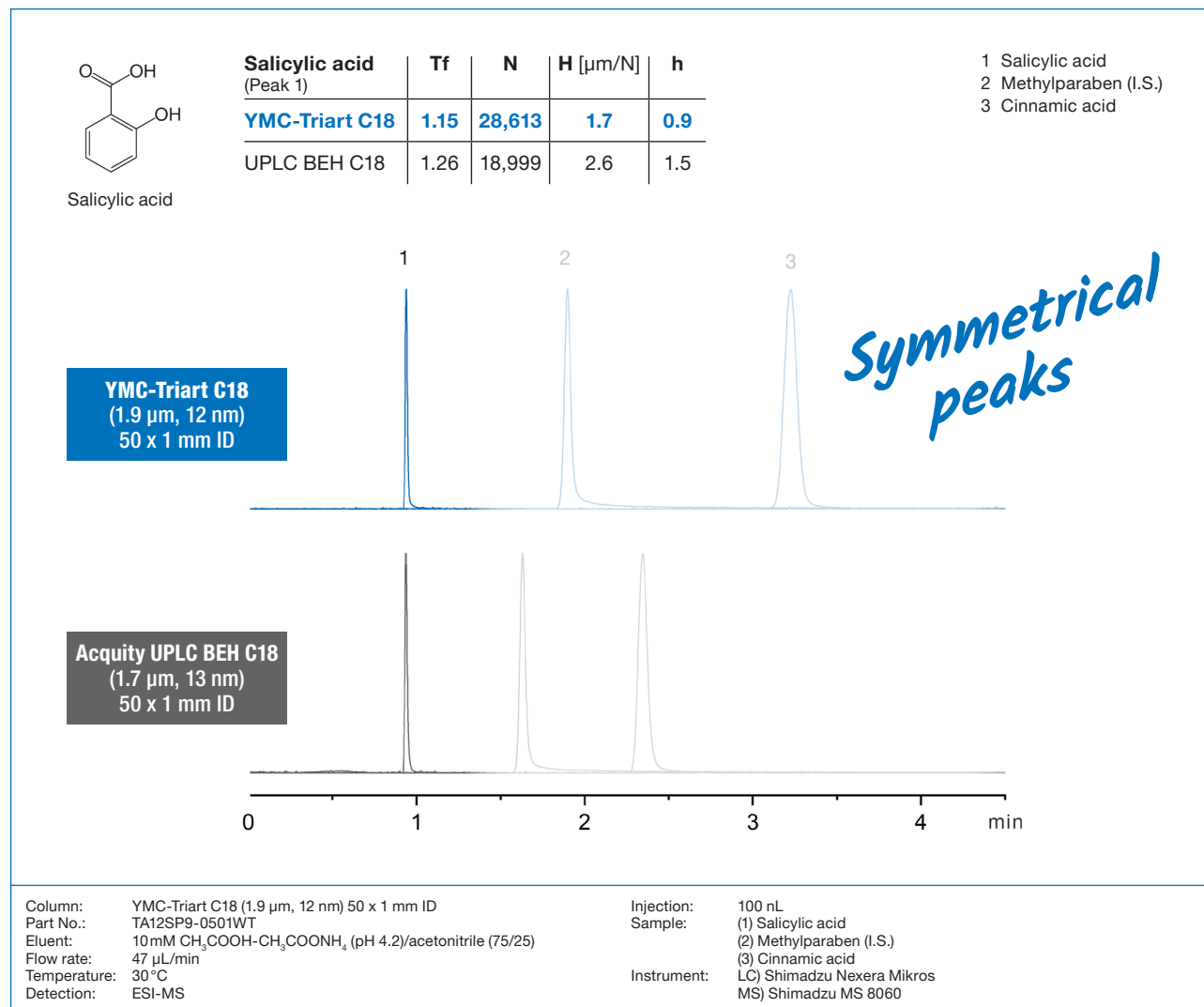


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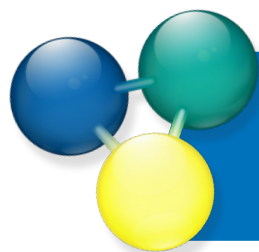
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Symmetrical peaks, higher performance and increased resolution



Application data by courtesy of: Tobias Werres, IUTA - Institut für Energie- und Umwelttechnik e.V., Duisburg, Germany.

**YMC-Triart phases are synthesised using methodology adapted from micro-reactor technology. This technique ensures a reduction in impurities that contribute to peak tailing during the analysis of some types of acidic compounds.**

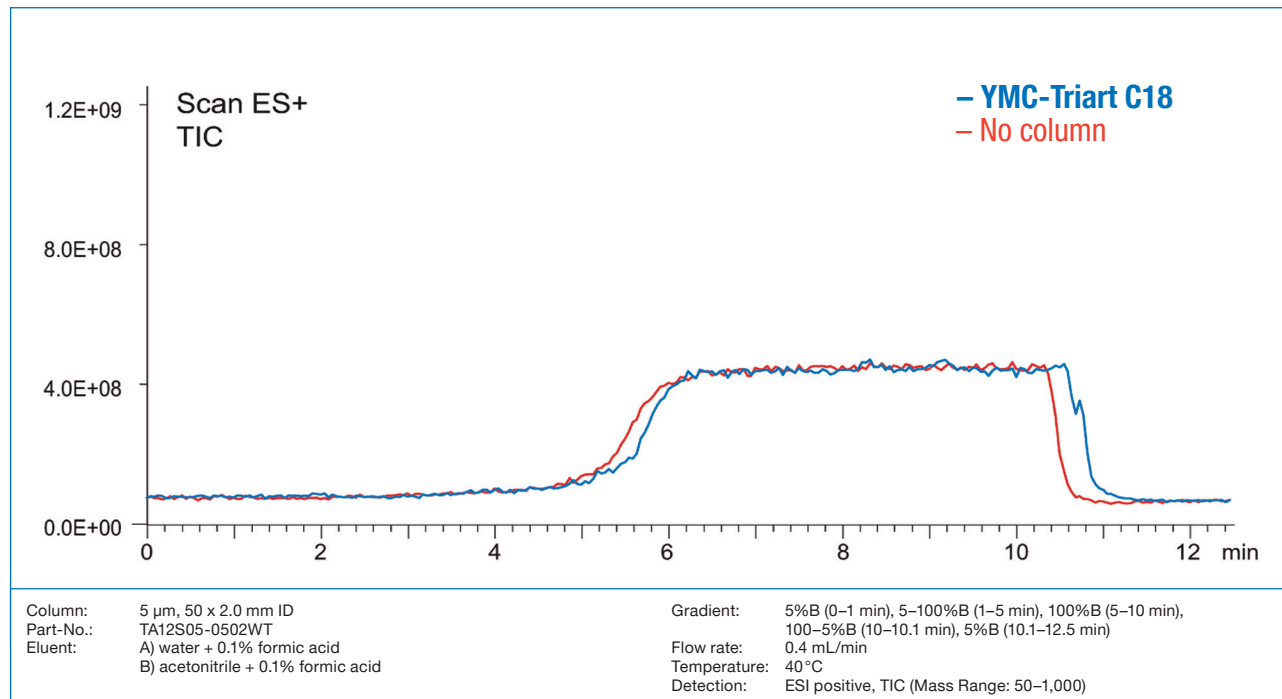


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### Full MS compatibility of YMC-Triart columns



**Column bleeding, caused by the fragments from the stationary phase, is the main reason for background noise and restrictions on detection limits. No bleed is observed in the test of total ion current (TIC) measured by LC/MS with blank or with a YMC-Triart C18 column. In terms of the signal/noise ratio (S/N ratio), YMC-Triart C18 columns not only reduce the background noise but also increase the sensitivity of the analysis.**

## Ordering Information

### YMC-Triart C18 UHPLC columns

Particle size [ $\mu$ m]	Column ID [mm]	Column Length [mm]		
		50	100	150
1.9	1.0	TA12SP9-0501WT	TA12SP9-1001WT	TA12SP9-1501WT

Other YMC-Triart phases available on request.

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