

Avantor® ACE® Excel® UHPLC columns

Designed to take advantage of low dispersion, ultra-high pressure UHPLC instruments, Avantor® ACE® Excel UHPLC columns give chromatographers more choices to achieve better results.



High Efficiency 2 µm and 1.7 µm Particles

Selectivity is unchanged from the 3 µm, 5 µm and 10 µm ACE HPLC phases. Excellent peak shape, reliable column-to-column reproducibility and exceptional column stability is available to UHPLC users with ACE Excel UHPLC columns.

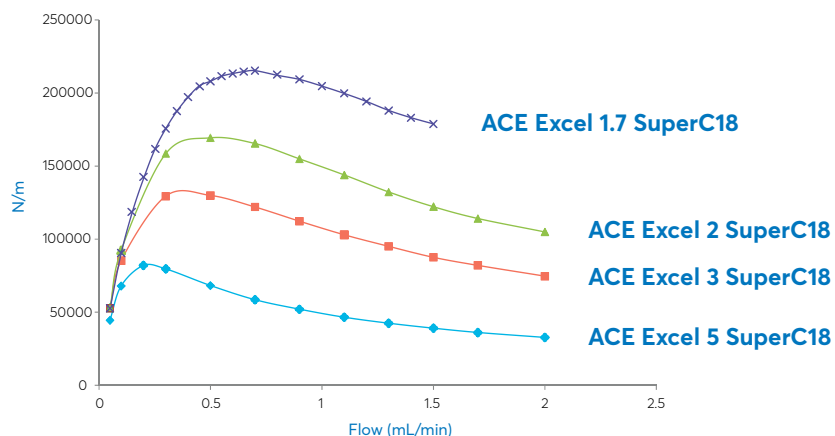
HSC High Stability Columns

ACE Excel columns are manufactured using a proprietary HSC (High Stability Column) manufacturing process that results in ultra-robust UHPLC columns.

Optimised UHPLC Hardware

ACE Excel columns utilise specially designed low dispersion hardware which enables high efficiency UHPLC separations up to a maximum pressure limit of 1,000 bar (15,000 psi).

A comparison of efficiency (N/m, plates per metre) vs. flow rate for different ACE particle sizes



Column: 50 x 2.1 mm

- Each particle size has an optimum flow rate (linear velocity) at which it shows highest efficiency (N).
- Smaller particles have a high optimum flow rate than larger particles and also have a broader optimum flow rate range than larger particles.

ACE TRANSLATOR TOOL

The ACE Translator Tool has been developed to aid the practising chromatographer to efficiently translate and transfer LC method between different columns and LC systems.

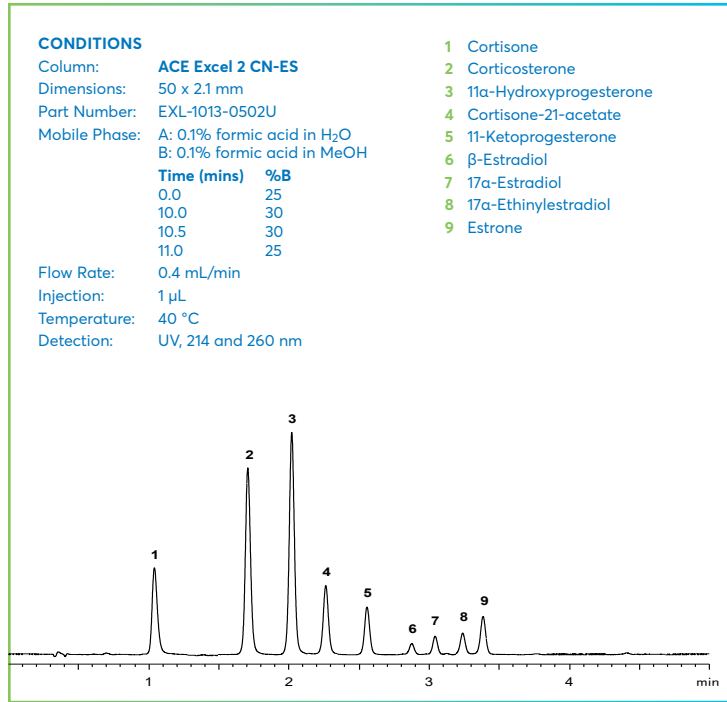
Convert your LC separation into an ultra-fast separation using ACE Excel 1.7 µm UHPLC columns today!

Visit vwr.com/ace to download the ACE Translator Tool.

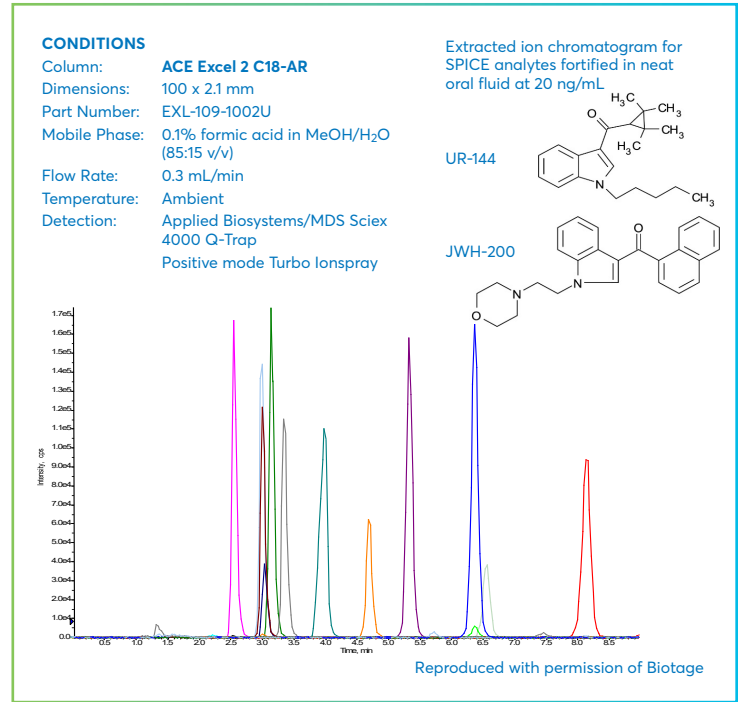
For further advice on how to translate your method, contact our specialist team via chromsupport@avantorsciences.com

EXAMPLE APPLICATIONS

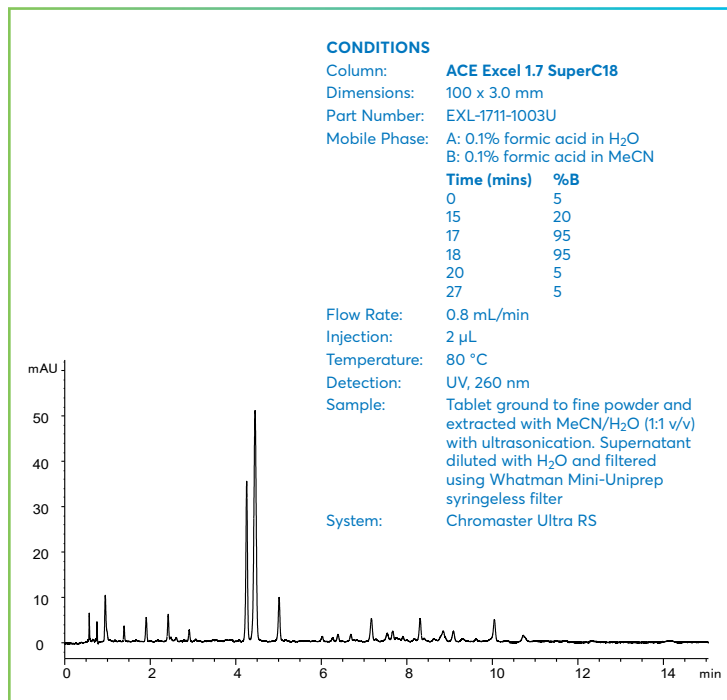
STEROIDS SEPARATION



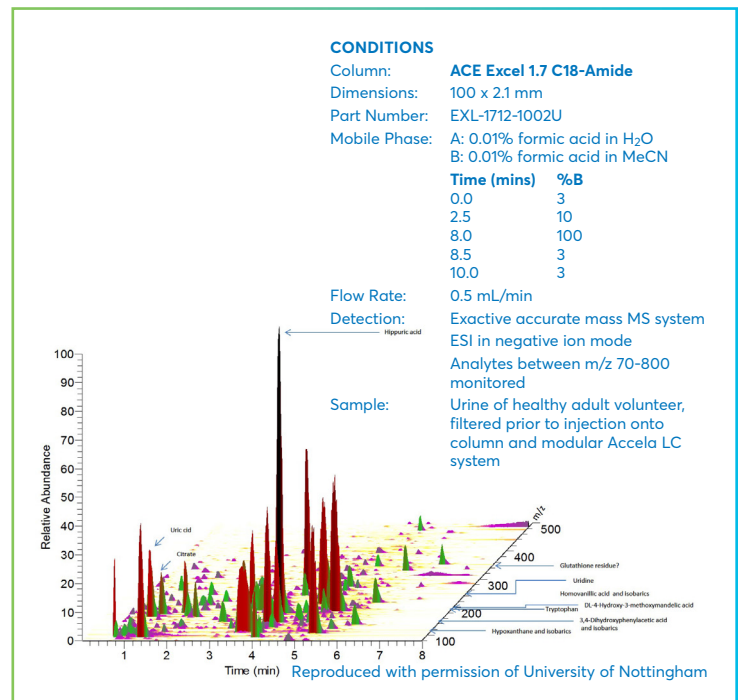
SYNTHETIC CANNABINOIDS (SPICE) FROM ORAL FLUID



GREEN TEA EXTRACT



HUMAN URINE METABOLITE PROFILING BY LC-MS



ORDERING INFORMATION

AVANTOR® ACE® TRADITIONAL CHEMISTRIES, 2 µm PARTICLES SIZES

– HPLC/UHPLC hardware format with 1,000 bar / 15,000 psi pressure limit

Column Dimensions	C18	C8	C4	CN	Phenyl	AQ	Sil
2.1 x 50 mm	EXL-101-0502U	EXL-102-0502U	EXL-103-0502U	EXL-104-0502U	EXL-105-0502U	EXL-106-0502U	EXL-107-0502U
2.1 x 75 mm	EXL-101-7502U	EXL-102-7502U	EXL-103-7502U	EXL-104-7502U	EXL-105-7502U	EXL-106-7502U	EXL-107-7502U
2.1 x 100 mm	EXL-101-1002U	EXL-102-1002U	EXL-103-1002U	EXL-104-1002U	EXL-105-1002U	EXL-106-1002U	EXL-107-1002U
2.1 x 125 mm	EXL-101-1202U	EXL-102-1202U	EXL-103-1202U	EXL-104-1202U	EXL-105-1202U	EXL-106-1202U	EXL-107-1202U
2.1 x 150 mm	EXL-101-1502U	EXL-102-1502U	EXL-103-1502U	EXL-104-1502U	EXL-105-1502U	EXL-106-1502U	EXL-107-1502U
3.0 x 50 mm	EXL-101-0503U	EXL-102-0503U	EXL-103-0503U	EXL-104-0503U	EXL-105-0503U	EXL-106-0503U	EXL-107-0503U
3.0 x 75 mm	EXL-101-7503U	EXL-102-7503U	EXL-103-7503U	EXL-104-7503U	EXL-105-7503U	EXL-106-7503U	EXL-107-7503U
3.0 x 100 mm	EXL-101-1003U	EXL-102-1003U	EXL-103-1003U	EXL-104-1003U	EXL-105-1003U	EXL-106-1003U	EXL-107-1003U
3.0 x 125 mm	EXL-101-1203U	EXL-102-1203U	EXL-103-1203U	EXL-104-1203U	EXL-105-1203U	EXL-106-1203U	EXL-107-1203U
3.0 x 150 mm	EXL-101-1503U	EXL-102-1503U	EXL-103-1503U	EXL-104-1503U	EXL-105-1503U	EXL-106-1503U	EXL-107-1503U
4.6 x 50 mm	EXL-101-0546U	EXL-102-0546U	EXL-103-0546U	EXL-104-0546U	EXL-105-0546U	EXL-106-0546U	EXL-107-0546U
4.6 x 75 mm	EXL-101-7546U	EXL-102-7546U	EXL-103-7546U	EXL-104-7546U	EXL-105-7546U	EXL-106-7546U	EXL-107-7546U
4.6 x 100 mm	EXL-101-1046U	EXL-102-1046U	EXL-103-1046U	EXL-104-1046U	EXL-105-1046U	EXL-106-1046U	EXL-107-1046U
4.6 x 125 mm	EXL-101-1246U	EXL-102-1246U	EXL-103-1246U	EXL-104-1246U	EXL-105-1246U	EXL-106-1246U	EXL-107-1246U
4.6 x 150 mm	EXL-101-1546U	EXL-102-1546U	EXL-103-1546U	EXL-104-1546U	EXL-105-1546U	EXL-106-1546U	EXL-107-1546U
ACE guard cartridges (3pk)*							
2.1-3.0 mm id	ACE-1P1-GD2U	ACE-1P2-GD2U	ACE-1P3-GD2U	ACE-1P4-GD2U	ACE-1P5-GD2U	ACE-1P6-GD2U	ACE-1P7-GD2U
4.0-4.6 mm id	ACE-1P1-GD4U	ACE-1P2-GD4U	ACE-1P3-GD4U	ACE-1P4-GD4U	ACE-1P5-GD4U	ACE-1P6-GD4U	ACE-1P7-GD4U

*Require ACE UHPLC guard holder H0011 (replacement ferrules for ACE UHPLC guard holder also available F0001 10pk)

AVANTOR® ACE® NOVEL CHEMISTRIES, 2 µm PARTICLES SIZES

– HPLC/UHPLC hardware format with 1,000 bar / 15,000 psi pressure limit

Column Dimensions	C18-AR	C18-PFP	SuperC18	C18-Amide	CN-ES
2.1 x 50 mm	EXL-109-0502U	EXL-1010-0502U	EXL-1011-0502U	EXL-1012-0502U	EXL-1013-0502U
2.1 x 75 mm	EXL-109-7502U	EXL-1010-7502U	EXL-1011-7502U	EXL-1012-7502U	EXL-1013-7502U
2.1 x 100 mm	EXL-109-1002U	EXL-1010-1002U	EXL-1011-1002U	EXL-1012-1002U	EXL-1013-1002U
2.1 x 125 mm	EXL-109-1202U	EXL-1010-1202U	EXL-1011-1202U	EXL-1012-1202U	EXL-1013-1202U
2.1 x 150 mm	EXL-109-1502U	EXL-1010-1502U	EXL-1011-1502U	EXL-1012-1502U	EXL-1013-1502U
3.0 x 50 mm	EXL-109-0503U	EXL-1010-0503U	EXL-1011-0503U	EXL-1012-0503U	EXL-1013-0503U
3.0 x 75 mm	EXL-109-7503U	EXL-1010-7503U	EXL-1011-7503U	EXL-1012-7503U	EXL-1013-7503U
3.0 x 100 mm	EXL-109-1003U	EXL-1010-1003U	EXL-1011-1003U	EXL-1012-1003U	EXL-1013-1003U
3.0 x 125 mm	EXL-109-1203U	EXL-1010-1203U	EXL-1011-1203U	EXL-1012-1203U	EXL-1013-1203U
3.0 x 150 mm	EXL-109-1503U	EXL-1010-1503U	EXL-1011-1503U	EXL-1012-1503U	EXL-1013-1503U
4.6 x 50 mm	EXL-109-0546U	EXL-1010-0546U	EXL-1011-0546U	EXL-1012-0546U	EXL-1013-0546U
4.6 x 75 mm	EXL-109-7546U	EXL-1010-7546U	EXL-1011-7546U	EXL-1012-7546U	EXL-1013-7546U
4.6 x 100 mm	EXL-109-1046U	EXL-1010-1046U	EXL-1011-1046U	EXL-1012-1046U	EXL-1013-1046U
4.6 x 125 mm	EXL-109-1246U	EXL-1010-1246U	EXL-1011-1246U	EXL-1012-1246U	EXL-1013-1246U
4.6 x 150 mm	EXL-109-1546U	EXL-1010-1546U	EXL-1011-1546U	EXL-1012-1546U	EXL-1013-1546U
ACE guard cartridges (3pk)*					
2.1-3.0 mm id	ACE-1P9-GD2U	ACE-1P10-GD2U	ACE-1P11-GD2U	ACE-1P12-GD2U	ACE-1P13-GD2U
4.0-4.6 mm id	ACE-1P9-GD4U	ACE-1P10-GD4U	ACE-1P11-GD4U	ACE-1P12-GD4U	ACE-1P13-GD4U

*Require ACE UHPLC guard holder H0011 (replacement ferrules for ACE UHPLC guard holder also available F0001 10pk)

AVANTOR® ACE® EXCEL® UHPLC COLUMNS

AVANTOR® ACE® 1.7 µm UHPLC COLUMNS

- HPLC/UHPLC hardware format with 1,000 bar / 15,000 psi pressure limit

Column Dimensions	C18	C18-AR	C18-PFP	SuperC18	C18-Amide	CN-ES	NH ₂
2.1 x 50 mm	EXL-171-0502U	EXL-179-0502U	EXL-1710-0502U	EXL-1711-0502U	EXL-1712-0502U	EXL-1713-0502U	EXL-1714-0502U
2.1 x 75 mm	EXL-171-7502U	EXL-179-7502U	EXL-1710-7502U	EXL-1711-7502U	EXL-1712-7502U	EXL-1713-7502U	EXL-1714-7502U
2.1 x 100 mm	EXL-171-1002U	EXL-179-1002U	EXL-1710-1002U	EXL-1711-1002U	EXL-1712-1002U	EXL-1713-1002U	EXL-1714-1002U
3.0 x 50 mm	EXL-171-0503U	EXL-179-0503U	EXL-1710-0503U	EXL-1711-0503U	EXL-1712-0503U	EXL-1713-0503U	EXL-1714-0503U
3.0 x 75 mm	EXL-171-7503U	EXL-179-7503U	EXL-1710-7503U	EXL-1711-7503U	EXL-1712-7503U	EXL-1713-7503U	EXL-1714-7503U
3.0 x 100 mm	EXL-171-1003U	EXL-179-1003U	EXL-1710-1003U	EXL-1711-1003U	EXL-1712-1003U	EXL-1713-1003U	EXL-1714-1003U
ACE guard cartridges (3pk)*							
2.1-3.0 mm id	ACE-1P1-GD2U	ACE-1P9-GD2U	ACE-1P10-GD2U	ACE-1P11-GD2U	ACE-1P12-GD2U	ACE-1P13-GD2U	-

*Require ACE UHPLC guard holder H0011 (replacement ferrules for ACE UHPLC guard holder also available F0001 10pk)

AVANTOR® ACE® UHPLC GUARDS

- Specifically compatible with Avantor® ACE® Excel 1.7 & 2 µm columns
- Pressure rated to 15,000 psi (1,000 bar) for UHPLC applications
- Two different column id options : 2.1-3.0 mm id and 4.0-4.6 mm id
- Require reusable holder H0011
- Low dead volume

