

**ULTRON VX-ODS**

**ULTRON VX-ODS** is reversed-phase column having monomeric octadecyl group. The bare silica of **ULTRON VX-ODS** is the same of ULTRON VX-SIL. Our excellent end-capping technology (secondary silylation) lead to the reduction of the influence of the residual silanol groups. We have three types (5, 10, and 15  $\mu\text{m}$ ) of the particle diameter. We also various column from 1 mm (narrow bore) to 50 mm (for preparative separations) in the inner diameter. Please select the column size according to the purpose.

Particle Size	Pore Size	Surface Area	Carbon Content
5 $\mu\text{m}$	12 nm	300 $\text{m}^2/\text{g}$	16 %

**Reproducibility between column lots**

**ULTRON VX-ODS** columns are cheked by the severe quality control every each manufacturing process.

The product passed many check point in the manufacturing process is **ULTRON VX-ODS**. The  $k'$  and value obtained with ULTRON VX-ODS shows the narrow difference between the batch and column lots. ULTRON VX-ODS shows excellent reproducibility and stability, in other test between column lots.

**Stereoselectivity, distribution equilibrium**

**ULTRON VX-ODS** which has monolayer of octadecyl group shows excellent stereoselectivity for the sample molecule. The distribution equilibrium is performed quickly under the gradient elution or at the exchange of the mobile phase used.

**Pressure resistance**

By the use of spherical silica gel, **ULTRON VX-ODS** shows the excellent the resisting pressure and even at fast flow rate of mobile phase, a stable separation is obtained.

Column	Particle Size ( $\mu\text{m}$ )	Column Size Length $\times$ Inner Diameter (mm)
VX-ODS (for Analytical)	5	150 $\times$ 4.6
		250 $\times$ 4.6
		150 $\times$ 6.0
VX-ODS (for Preparative)	5	250 $\times$ 20.0
VX-ODS (Narrow Bore)	5	150 $\times$ 2.0
		250 $\times$ 2.0
		150 $\times$ 1.0
		250 $\times$ 1.0
VX-ODS (for Analytical)	10	150 $\times$ 4.6
		250 $\times$ 4.6
		150 $\times$ 6.0
VX-ODS (for Preparative)	10	250 $\times$ 20.0
		250 $\times$ 30.0
		250 $\times$ 50.0
VX-ODS (for Analytical)	15	250 $\times$ 4.6
VX-ODS (for Preparative)	15	250 $\times$ 20.0
		250 $\times$ 30.0
		250 $\times$ 50.0

## HPLC Column For Normal Phase (ODS)

### ULTRON VX-ODS.G (Guard Column)

Column	Particle Size (μm)	Column Size Length × Inner Diameter (mm)
VX-ODS.G (for Analytical)	5	10 × 4.0
VX-ODS.G (for Preparative)		15 × 8.0
VX-ODS.G (for Analytical)	10	10 × 4.0
VX-ODS.G (for Preparative)		15 × 8.0
VX-ODS.G (for Analytical)	15	10 × 4.0
VX-ODS.G (for Preparative)		15 × 8.0
VX-ODS (Two Guard Cartridges)	5	5 × 2.0
VX-ODS (Two Guard Cartridges)		10 × 4.6
Holder for Guard Cartridge (with Adaptor)	For 5 × 2.0 mm column	
Holder for Guard Cartridge (with Adaptor)	For 10 × 4.6 mm column	

## HPLC Column For Reversed Phase (Octyl)

### ULTRON VX-Octyl

The earth environment is very important problem. We have to defend our earth from the atmospheric pollution, the contamination of the water, the soil pollution and the industrial waste pollution. The reduction of large amount of organic solvents is also needed in the HPLC analysis which can be performed for many samples in the various field. In order to overcome many problems mentioned above, octyl column modified with short alkyl chain than that of ODS column may be necessary and become popular. **ULTRON VX-Octyl** have a necessary characteristics to satisfy for such requirements.

A highly refined synthetic technology of ULTRON VX-ODS was applied to **ULTRON VX-Octyl**.

#### Characteristics

The column life has been greatly improved.

ULTRON VX-Octyl is very few in the difference between columns lots and shows excellent reproducibility.

ULTRON VX-Octyl save the analysis time compared with ODS and shows excellent separation.

The use of organic solvent is decreased.

Because distribution equilibrium can be achieved quickly and the adsorbed material can be eluted easily compared with ODS, The best separation can be obtained by the gradient elution.

#### Applications

· Pharmaceutical compounds, Pesticides, Chemical compounds, Food, Environmental compounds and others

Column	Particle Size (μm)	Column Size Length × Inner Diameter (mm)
ULTRON VX-Octyl (for Analytical)	5	150 × 4.6
		250 × 4.6
ULTRON VX-Octyl (for Preparative)		250 × 20.0
ULTRON VX-Octyl.G (Guard Column)		10 × 4.0
ULTRON VX-Octyl.G (Guard Column for Preparative)		15 × 8.0

## HPLC Column For Reversed Phase (STR ODS)

### STR ODS-II

#### Characteristics

The effect of the metal oxide is suppressed minimum because of the highly-purified silica gel as a base material of STR series.

STR series are durable column because of the use of mechanically strong silica gel.

STR series column is durable in acidic and basic mobile phase.

STR series are easy to operate and show high performance, because the analytical operation pressure is low.

The excellent end capping technology shows good peak shape for the basic substances and acidic compounds and for the samples which form complex with metal.

Column	Particle Shape	Particle Size	Pore Size	Specific Surface Area	Carbon Content
ODS-II	Spherical Porous Silica Gel	5 $\mu$ m	12 nm	320 m <sup>2</sup> /g	17 %

Column	Particle Size ( $\mu$ m)	Column Size Length $\times$ Inner Diameter (mm)
STR ODS- (Narrow Bore)	5	150 $\times$ 2.0
STR ODS- (Narrow Bore)		250 $\times$ 2.0
STR ODS- (for Analytical)		100 $\times$ 4.0
STR ODS- (for Analytical)		150 $\times$ 4.0
STR ODS- (for Analytical)		250 $\times$ 4.0
STR ODS- (for Analytical)		150 $\times$ 4.6
STR ODS- (for Analytical)		250 $\times$ 4.6
STR ODS- (for Analytical)		150 $\times$ 6.0
STR ODS- (Guard Column)		10 $\times$ 4.0
STR ODS- (Guard Column)		10 $\times$ 4.6
STR ODS- (Guard Column)		10 $\times$ 6.0
STR ODS- (for Preparative)		250 $\times$ 20.0
STR ODS- (Guard Column for Preparative)		50 $\times$ 20.0
STR ODS- PEEK (for Analytical)		150 $\times$ 4.6
STR ODS- PEEK (for Analytical)		250 $\times$ 4.6
STR ODS- PEEK (Guard Column)		10 $\times$ 4.6
STR ODS- (Two Guard Cartridges)		5 $\times$ 2.0
STR ODS- (Two Guard Cartridges)		10 $\times$ 4.6
Holder for Guard Cartridge (with Adaptor)	For 5 $\times$ 2.0 mm column	
Holder for Guard Cartridge (with Adaptor)	For 10 $\times$ 4.6 mm column	

## STR ODS-M

Column	Particle Shape	Particle Size	Pore Size	Specific Surface Area	Carbon Content
ODS-M	The Perfect and Spherical Porous Silica Gel	5 $\mu\text{m}$	10 nm	350 m <sup>2</sup> /g	15 %

Column	Particle Size ( $\mu\text{m}$ )	Column Size Length $\times$ Inner Diameter (mm)
STR ODS-M	5	150 $\times$ 4.0
STR ODS-M		250 $\times$ 4.0
STR ODS-M		150 $\times$ 4.6
STR ODS-M		250 $\times$ 4.6
STR ODS-M		150 $\times$ 6.0
STR ODS-M		10 $\times$ 4.0
STR ODS-M		50 $\times$ 4.0