

VertiSep™ IRS

VertiSep™ IRS HPLC Columns

- An excellent alternative to Waters® μ Bondapak™ at a reasonable lower price
- Most methods on μ Bondapak™ can be transferred to VertiSep™ IRS
- Excellent Column-to-Column reproducibility
- Full guarantee



VertiSep™ IRS packings were developed to provide a physical and performance characteristics very similar to those of Waters® μ Bondapak™.

VertiSep™ IRS packings provide the results indicated comparable capacity, selectivity efficiency and peak symmetry when compared to μ Bondapak™. Most methods developed on μ Bondapak™ can be transferred to VertiSep™ IRS, even for USP applications.

VertiSep™ IRS packings are manufactured to minimize lot-to-lot variation with a strict QC program to ensure excellent column-to-column reproducibility.

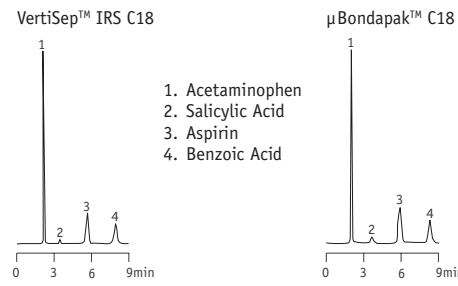
VertiSep™ IRS packings are guaranteed separations of your samples will be comparable to separations with μ Bondapak™ columns. If VertiSep™ IRS does not meet your satisfaction, send in comparative data within 45 days and keep VertiSep™ IRS column for FREE.

VertiSep™ IRS are manufactured by statistic process control of silica synthesis, bonding and column packing. The reproducible column packing method control provides exceptional efficiency, symmetry and reproducible capacity factor.

Specifications						
Packing	Particle Size (mm)	Carbon Load (%)	Pore Size (Å)	Pore Volume (mL/g)	Surface Area (m ² /g)	End Capped
C18	10	10	125	1.0	300	Yes
Ph	10	9	125	1.0	300	Yes
CN	10	6	125	1.0	300	Yes
NH2	10	4	125	1.0	300	No
Si	10	-	125	1.0	300	No

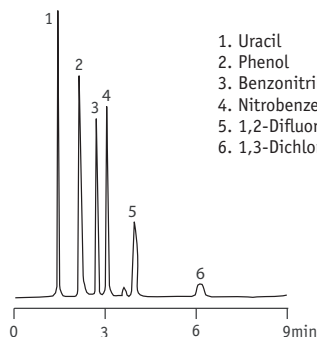
Packing Characteristics Comparison		
	μ Bondapak™ C18	VertiSep™ IRS C18
Particle Shape	Irregular	Irregular
Particle Size	10mm	10 mm
Pore Size	125Å	125Å
Surface Area	300m ² /g	300m ² /g
Carbon Load	10%	10%
Endcapped	Yes	Yes

USP XXII Acetaminophen and Aspirin Tablets Method



Column: 10 μ m, 3.9x300mm
 Mobile Phase: 0.225% Tetramethylammonium Hydroxide Pentahydrate in a mixture of Water: Methanol:Acetonitrile:Acetic Acid (75:12.5:12.5:0.1)
 Flowrate: 2mL/min
 Detection: UV280nm

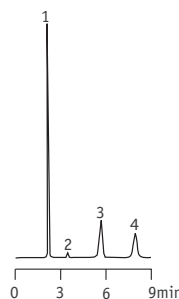
Organic Test Mix



1. Uracil
2. Phenol
3. Benzonitrile
4. Nitrobenzene
5. 1,2-Difluorobenzene
6. 1,3-Dichloro-4,6-dinitrobenzene

Column: VertiSep™ IRS C18 10 μ m, 3.9x300mm
 Mobile Phase: ACN:Water (65:35)
 Flow Rate: 1.5mL/min
 Detection: UV254nm

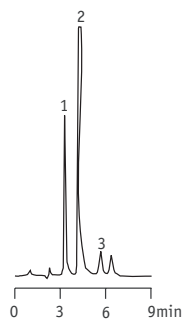
USP XXII Acetaminophen



1. Acetaminophen
2. Salicylic acid
3. Aspirin
4. Benzoic acid

Column: VertiSep™ IRS C18 10 μ m, 3.9x300mm
 Mobile Phase: Water:MeOH:ACN:CH₃COOH
 (75:12.5:12.5:0.1)
 Flow Rate: 2.0mL/min
 Detection: UV280nm

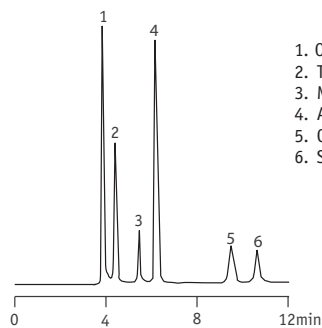
Plant Growth Regulators



1. Methyl-2, 7-dichloro-9-hydroxyfluorene-9-carboxylate
2. Methyl-2-chloro-9-hydroxyfluorene-9-carboxylate
3. Methyl-9-hydroxyfluorene-9-carboxylate

Column: VertiSep™ IRS C18 10 μ m, 3.9x300mm
 Mobile Phase: ACN:Water (55:45)
 Flow Rate: 1.5mL/min
 Detection: UV254nm

Organic Acids



1. Oxalic acid
2. Tartaric acid
3. Malic acid
4. Ascorbic acid
5. Citric acid
6. Succinic acid

Column: VertiSep™ IRS C18 10 μ m, 3.9x300mm
 Mobile Phase: 0.05M KH₂PO₄, pH2.5
 Flow Rate: 0.7mL/min
 Temp: 25°C
 Detection: UV215nm

Ordering Information

Phase	Particle Size (μ m)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ IRS					
C18	10	Analytical	3.9 x 150	1	03GA-L432
	10	Analytical	3.9 x 300	1	03GA-L932
Ph	10	Analytical	3.9 x 150	1	03GD-L432
	10	Analytical	3.9 x 300	1	03GD-L932
CN	10	Analytical	3.9 x 150	1	03GE-L432
	10	Analytical	3.9 x 300	1	03GE-L932
NH2	10	Analytical	3.9 x 150	1	03GF-L432
	10	Analytical	3.9 x 300	1	03GF-L932
Si	10	Analytical	3.9 x 150	1	03GG-L432
	10	Analytical	3.9 x 300	1	03GG-L932

Ordering Information

Phase	Particle Size (μ m)	Formats	I.D. Length (mm)	QTY	Part No.
VertiSep™ IRS Guard Cartridges*					
C18	10	Guard	3.9 x 10	2	03GA-L132
Ph	10	Guard	3.9 x 10	2	03GD-L132
CN	10	Guard	3.9 x 10	2	03GE-L132
NH2	10	Guard	3.9 x 10	2	03GF-L132
Si	10	Guard	3.9 x 10	2	03GG-L132

*Guard holder required

Ordering Information

Description	QTY	Part No.
Guard Holder with Coupler For column I.D. 2.1-7.8 mm	1	0300-0001