

Tracer Extrasil





The new range of Tracer Extrasil packings has been specially developed to replace one of the most popular packings on the market (WS).

All the physical and chromatographic parameters evaluated show a total equivalence between both materials, and what is more important, this has been certified by the excellent results obtained by the many users who upto now have tried this packing.

Economy

Tracer Extrasil represents the most economical choice of HPLC packings.

Reproducibility

An advanced manufacturing process and a strict control of each one of its steps ensures a maximum reproducibility and efficiency in every one of the columns.

Guarantee

The confidence we have in our product enables us to offer a complete guarantee on these columns, so that if for any reason whatever a client thinks that a TRACER EXTRASIL column does not operate in an identical manner to the equivalent WS packing, we will refund his money.

Characteristics of the material

As shown in the following table, the new packing TRACER EXTRASIL is perfectly equivalent to the reference material in all its physicochemical characteristics.

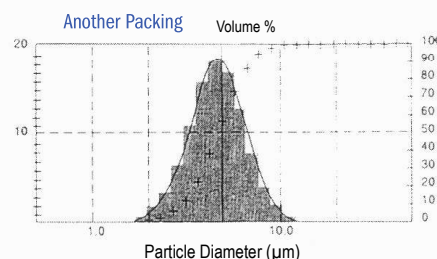
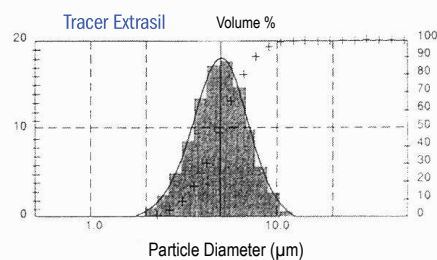
Characteristics

Tracer Extrasil 3,5 & 10 µm 80 Å 220 m ² /g	Particle Size Pore Size Surface area Carbon content	WS Packing 3,5 & 10 µm 80 Å 220 m ² /g
4%	C1	4%
6%	C6	6%
6%	C8	6%
7%	ODS-1	7%
12%	ODS-2	12%
3,5%	CN	3,5%
2%	NH2	2%
3,0%	Phenyl	3,0%
-	SAX	-
-	SCX	-

Distribution of particle size

In the development of this new material there has been special care in optimization of the size of the particle, given that this control is essential to get the best efficiency and stability in the packing.

The comparison made with the WS packing shows once more the total equivalence of these two materials.

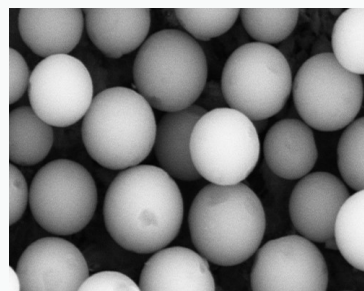


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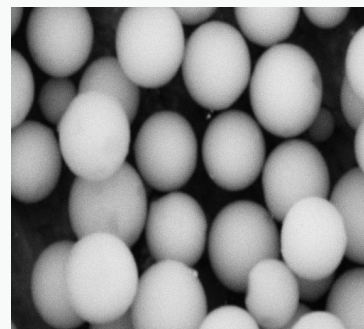
S.E.M. of the silica particle

The packing that results shows an almost perfect sphericity, as the images made by a scanning electron microscope show.

Tracer EXTRASIL



Another Packing

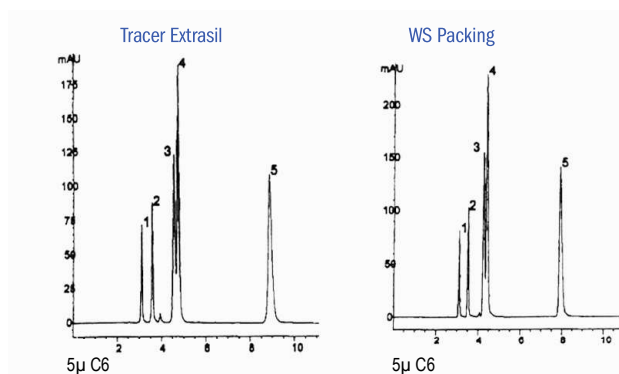


Applications

In addition to the complete agreement between the comparative data for both packings, the definitive proof comes from their comparison in a wide range of applications.

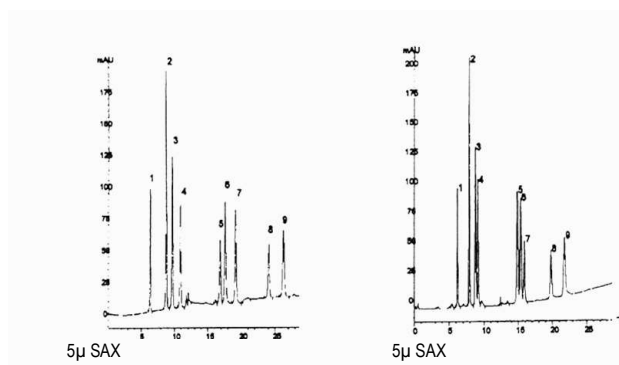
Catecholamines

Dimensions: 250 x 4.6 mm
 Mobil Phase: CH₂OH:25 mM KH₂PO₄ pH 2.0 (2:98)
 Flow Rate: 1.0mL/min
 Temperature: 40°C
 Detection: UV@ 270nm
 Sample: 1. Norepinephrine
 2. Betametasone
 3. Dopamine
 4. L-DOPA
 5. Serotonine



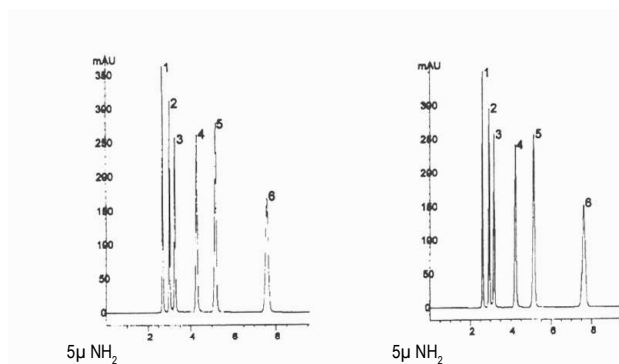
Nucleotides

Dimensions: 250 x 4.6 mm
 Mobil Phase: A: 0.04M KH₂PO₄ pH 5.5
 B: 0.5M KH₂PO₄ pH 5.5
 Flow Rate: 1.0mL/min
 Detection: UV@ 254nm
 Sample: 1. β-NAD
 2. IMP
 3. GMP
 4. AMP
 5. GDP
 6. ADP
 7. NADP
 8. ITP
 9. ATP



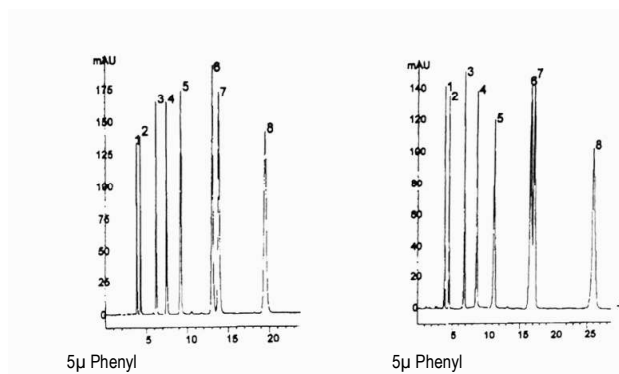
Corticosteroids

Dimensions: 250 x 4.6 mm
 Mobil Phase: CH₂Cl₂:CH₃OH (95:5)
 Flow Rate: 1.0mL/min
 Detection: UV@ 254nm
 Sample: 1. Deoxicorticoesterone Acetate
 2. Desoxicorticoesterone
 3. Hidrocortisone 21-Acetate
 4. Corticoesterone
 5. Cortisone
 6. Hidrocortisone



Aromatic Ketones

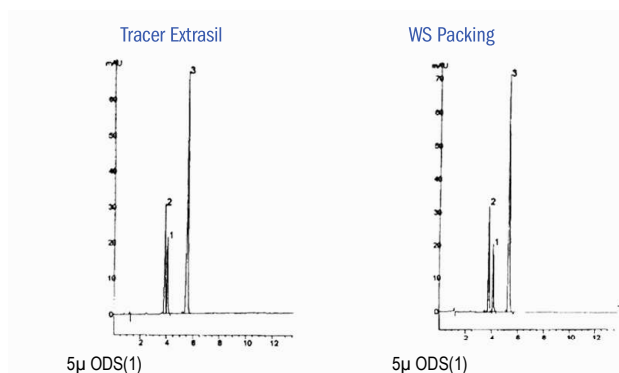
Dimensions: 250 x 4.6 mm
 Mobil Phase: CH₂ CN :CH₂ O (33:67)
 Flow Rate: 1.0mL/min
 Detection: UV@ 254nm
 Sample: 1. Benzamide
 2. Alcohol Bencilic
 3. Acetophenone
 4. Methyl Benzoat
 5. Phenetole
 6. Naphtalene
 7. Benzophenone
 8. Biphenile



SRM 869

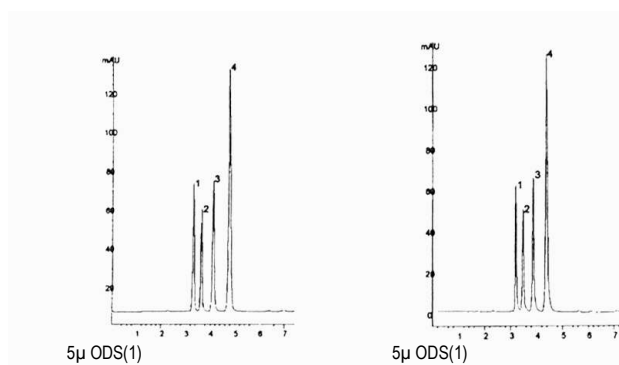
Dimensions: 250 x 4.6 mm
 Mobil Phase: H₂O:CH₃CN (15:85)
 Flow Rate: 2.0mL/min
 Temperature: 35°C
 Detection: UV@ 260nm
 Sample: 1. Benzo (a) pirene (BaP)
 2. Phenantro (3,4-C)
 2. Phenantrene (Ph Ph)
 3. Tetrabenzonaphthalene

Tracer Extrasil ODS 2 aTBN/BaP = 1,77
 Packing WS ODS-2 aTBN/BaP = 1,70



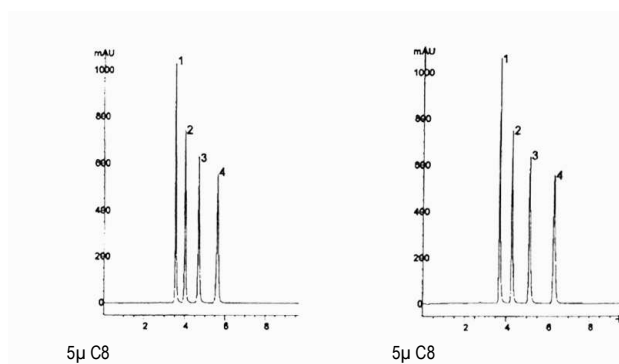
4-Hydroxybenzoates

Dimensions: 250 x 4.6 mm
 Mobil Phase: H₂O:CH₃CN (35:65)
 Flow Rate: 1.0mL/min
 Detection: UV@ 254nm
 Sample: 1. Methyl-4-hydroxibenzoate
 2. Ethyl-4-hydroxibenzoate
 3. Propyl-4-hydroxibenzoate
 4. Butyl-4-hydroxibenzoate



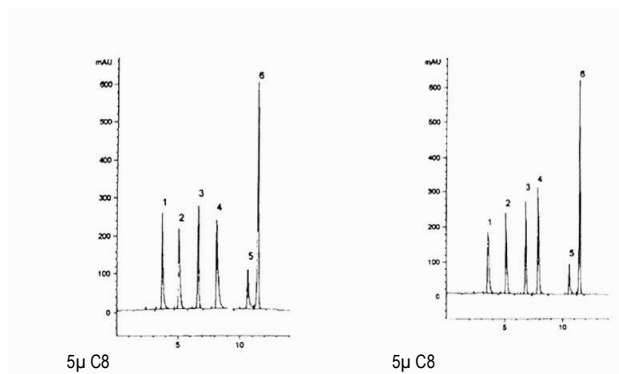
4-Hydroxybenzoates

Dimensions: 250 x 4.6 mm
 Mobil Phase: H₂O:CH₃CN (45:55)
 Flow Rate: 1.0mL/min
 Detection: UV@ 254nm
 Sample: 1. Methyl- 4-hydroxibenzoate
 2. Ethyl-4-hydroxibenzoate
 3. Propyl-4-hydroxibenzoate
 4. Butyl-4-hydroxibenzoate



Hydrosoluble Vitamines

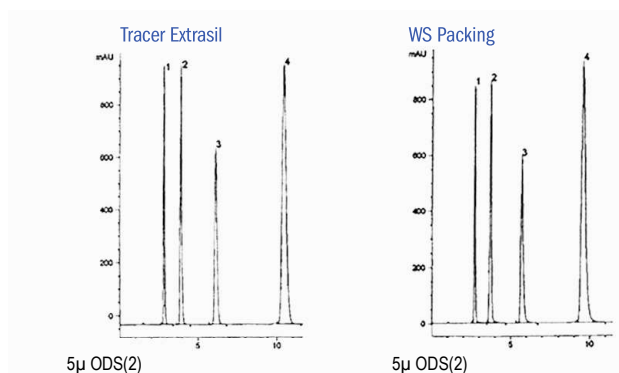
Dimensions: 150 x 4.6 mm
 Mobil Phase: A: 5mM 1-Penta sodic nesulfonate in 0.1% H₃PO₄
 B: 5mM 1-Sodic Pentanesulfonate in 0.1% H₃PO₄ in 80 % CH₃CN A:B (97.5:2.5) to A:B (70:30) in 20 min.
 Flow Rate: 1.0mL/min
 Detection: UV@ 254nm
 Sample: 1. Nicotinamine
 2. Pyridoxal
 3. Acide p-amynobenzaic
 4. Tyamine
 5. Folic Acid
 6. Riboflavine



4-Hydroxybenzoat

Dimensions: 150 x 4.6 mm
 Mobil Phase: H₂O:CH₃CN (40:60)
 Flow Rate: 1.0mL/min
 Temperature: 40°C
 Detection: UV@ 254nm
 Sample:

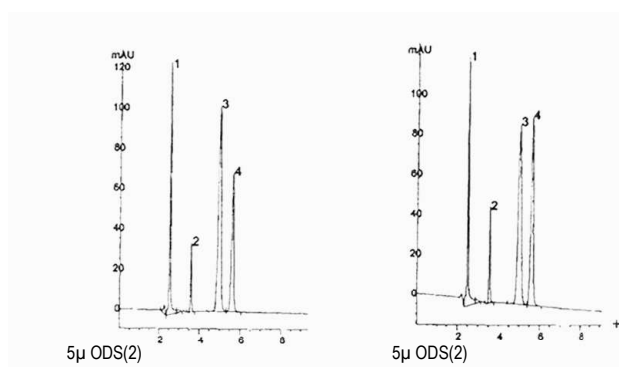
1. Methyl-4-hydroxybenzoat
2. Ethyl-4-hydroxybenzoat
3. Propyl-4-hydroxybenzoat
4. Butyl-4-hydroxybenzoat



Polar Compounds

Dimensions: 250 x 4.6 mm
 Mobil Phase: 25mM KH₂PO₄, pH 2.5
 Flow Rate: 1.0mL/min
 Temperature: 40°C
 Detection: UV@ 230nm
 Sample:

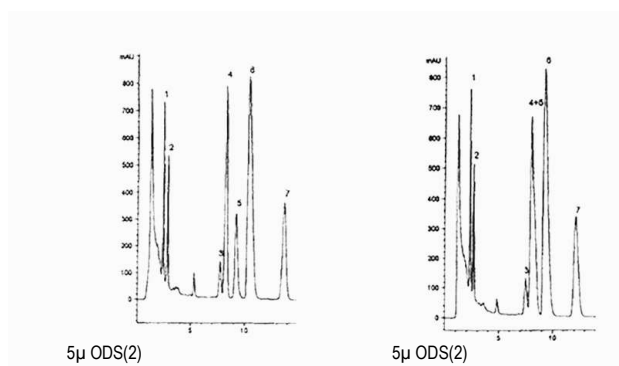
1. L-Cysteine
2. L-ascorbic Acid
3. Glutathione
4. Uric Acid



Liposoluble Vitamines

Dimensions: 150 x 4.6 mm
 Mobil Phase: CH₃CN:CH₃OH (75:25)
 Flow Rate: 1.3mL/min
 Detection: UV@ 280nm
 Sample:

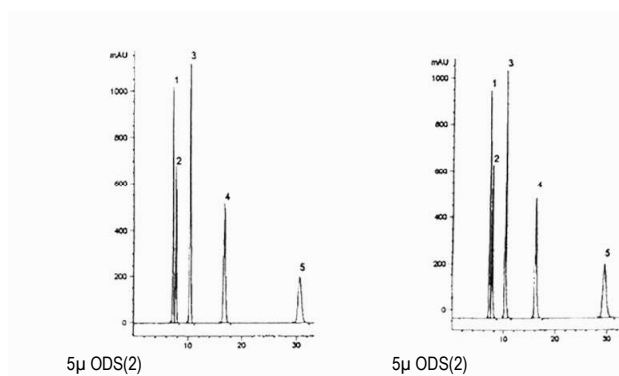
1. Vitamine A
2. Vitamine A Acetate
3. Vitamine D2
4. Vitamine D3
5. Vitamine E
6. Vitamine E Acetate
7. Vitamine K1



Pesticides/Herbicides

Dimensions: 150 x 4.6 mm
 Mobil Phase: H₂O:CH₃CN (70:30)
 Flow Rate: 1.0mL/min
 Detection: UV@ 254nm
 Sample:

1. Baygon™
2. Carbofuran
3. Carbaryl
4. Prophan
5. Captan





Analytical columns Tracer EXTRASIL

Function		Dimensions									
Particle size(µm)		10 x 0.46 cm	10 x 0.4 cm	12.5 x 0.46 cm	12.5 x 0.4 cm	15 x 0.46 cm	15 x 0.4 cm	20 x 0.46 cm	20 x 0.4 cm	25 x 0.46 cm	25 x 0.4 cm
ODS1	5	TR-016050	TR-416050	TR-016051	TR-416051	TR-016052	TR-416052	TR-016053	TR-416053	TR-016054	TR-416054
ODS2	5	TR-016055	TR-416055	TR-016056	TR-416056	TR-016057	TR-416057	TR-016058	TR-416058	TR-016059	TR-416059
Si	5	TR-016060	TR-416060	TR-016061	TR-416061	TR-016062	TR-416062	TR-016063	TR-416063	TR-016064	TR-416064
C1	5	TR-016065	TR-416065	TR-016066	TR-416066	TR-016067	TR-416067	TR-016068	TR-416068	TR-016069	TR-416069
C6	5	TR-016070	TR-416070	TR-016071	TR-416071	TR-016072	TR-416072	TR-016073	TR-416073	TR-016074	TR-416074
C8	5	TR-016075	TR-416075	TR-016076	TR-416076	TR-016077	TR-416077	TR-016078	TR-416078	TR-016079	TR-416079
CN	5	TR-016080	TR-416080	TR-016081	TR-416081	TR-016082	TR-416082	TR-016083	TR-416083	TR-016084	TR-416084
NH2	5	TR-016085	TR-416085	TR-016086	TR-416086	TR-016087	TR-416087	TR-016088	TR-416088	TR-016089	TR-416089
Phenyl	5	TR-016090	TR-416090	TR-016091	TR-416091	TR-016092	TR-416092	TR-016093	TR-416093	TR-016094	TR-416094
SAX	5	TR-016095	TR-416095	TR-016096	TR-416096	TR-016097	TR-416097	TR-016098	TR-416098	TR-016099	TR-416099
SCX	5	TR-016100	TR-416100	TR-016101	TR-416101	TR-016102	TR-416102	TR-016103	TR-416103	TR-016104	TR-416104
ODS1	10	TR-016105	TR-416105	TR-016106	TR-416106	TR-016107	TR-416107	TR-016108	TR-416108	TR-016109	TR-416109
ODS2	10	TR-016110	TR-416110	TR-016111	TR-416111	TR-016112	TR-416112	TR-016113	TR-416113	TR-016114	TR-416114
Si	10	TR-016115	TR-416115	TR-016116	TR-416116	TR-016117	TR-416117	TR-016118	TR-416118	TR-016119	TR-416119
C1	10	TR-016156	TR-416156	TR-016157	TR-416157	TR-016158	TR-416158	TR-016159	TR-416159	TR-016160	TR-416160
C6	10	TR-016120	TR-416120	TR-016121	TR-416121	TR-016122	TR-416122	TR-016123	TR-416123	TR-016124	TR-416124
C8	10	TR-016125	TR-416125	TR-016126	TR-416126	TR-016127	TR-416127	TR-016128	TR-416128	TR-016129	TR-416129
CN	10	TR-016130	TR-416130	TR-016131	TR-416131	TR-016132	TR-416132	TR-016133	TR-416133	TR-016134	TR-416134
NH2	10	TR-016135	TR-416135	TR-016136	TR-416136	TR-016137	TR-416137	TR-016138	TR-416138	TR-016139	TR-416139
SAX	10	TR-016151	TR-416151	TR-016152	TR-416152	TR-016153	TR-416153	TR-016154	TR-416154	TR-016155	TR-416155

Ultrarapid columns Tracer EXTRASIL

Function		Dimensions							
Particle size	(µm)	4 x 0.46 cm	4 x 0.4 cm	5 x 0.46 cm	5 x 0.4 cm	10 x 0.46 cm	10 x 0.4 cm		
ODS 1	3	TR-013200	TR-413200	TR-025420	TR-417050	TR-013201	TR-413201		
ODS 2	3	TR-013205	TR-413205	TR-025422	TR-417052	TR-013206	TR-413206		
Si	3	TR-013210	TR-413210	TR-025424	TR-417054	TR-013211	TR-413211		
C1	3	TR-013215	TR-413215	TR-025426	TR-417056	TR-013216	TR-413216		
C6	3	TR-013220	TR-413220	TR-025428	TR-417058	TR-013221	TR-413221		
C8	3	TR-013226	TR-413226	TR-025430	TR-417060	TR-013227	TR-413227		
CN	3	TR-013231	TR-413231	TR-025432	TR-417062	TR-013232	TR-413232		
NH2	3	TR-013236	TR-413236	TR-025434	TR-417064	TR-013237	TR-413237		
Phenyl	3	TR-013241	TR-413241	TR-025436	TR-417066	TR-013242	TR-413242		

Function		Dimensions							
Particle size	(µm)	15 x 0.46 cm	15 x 0.4 cm	20 x 0.46 cm	20 x 0.4 cm	25 x 0.46 cm	25 x 0.4 cm		
ODS 1	3	TR-013202	TR-413202	TR-013203	TR-413203	TR-013204	TR-413204		
ODS 2	3	TR-013207	TR-413207	TR-013208	TR-413208	TR-013209	TR-413209		
Si	3	TR-013212	TR-413212	TR-013213	TR-413213	TR-013214	TR-413214		
C1	3	TR-013217	TR-413217	TR-013218	TR-413218	TR-013219	TR-413219		
C6	3	TR-013222	TR-413222	TR-013223	TR-413223	TR-013224	TR-413224		
C8	3	TR-013228	TR-413228	TR-013229	TR-413229	TR-013230	TR-413230		
CN	3	TR-013233	TR-413233	TR-013234	TR-413234	TR-013235	TR-413235		
NH2	3	TR-013238	TR-413238	TR-013239	TR-413239	TR-013240	TR-413240		
Phenyl	3	TR-013243	TR-413243	TR-013244	TR-413244	TR-013245	TR-413245		