



Tracer Extrasil Tk

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.

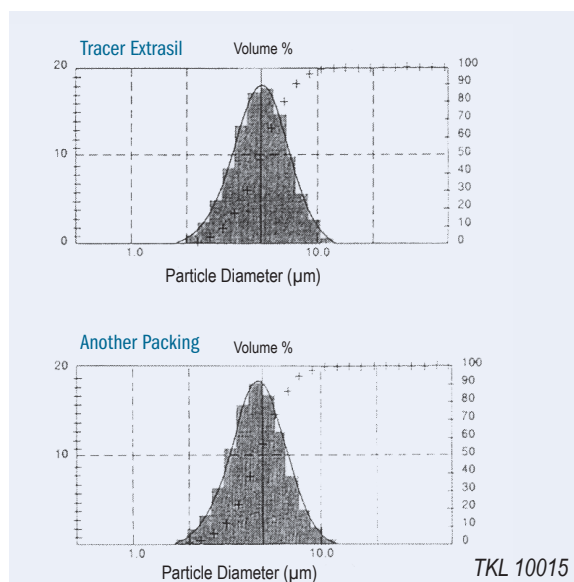
Characteristics

Tracer Extrasil 3,5 & 10 µm 80 A 220 m ² /g	Particle Size Pore Size Surface area Carbon content	WS Packing 3,5 & 10 µm 80 A 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%	NH ₂	2%
3,0%	Phenyl	3,0%
-	8AX	-
-	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.



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.



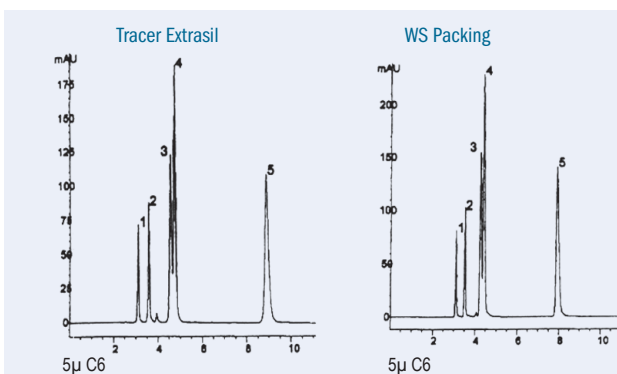
Applications

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.



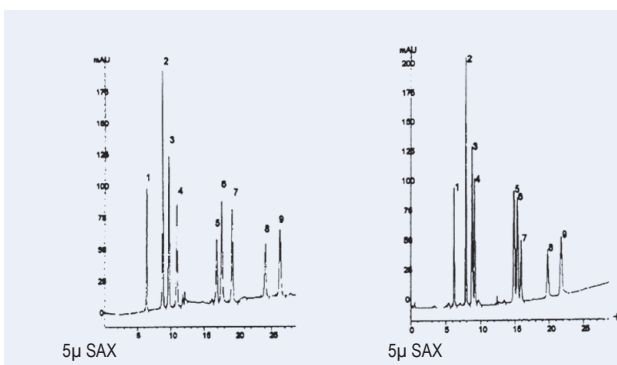
Catecholamines

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



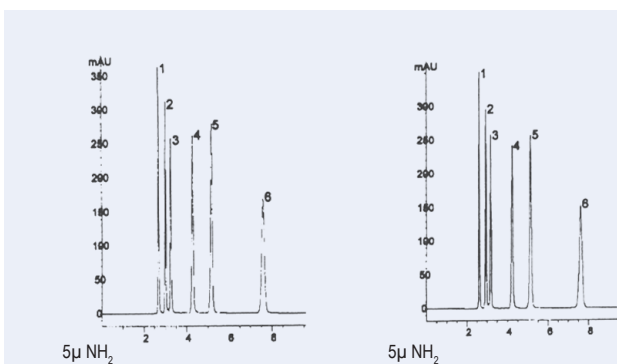
Nucleotides

Dimensions: 250 x 4.6 mm
 Mobil Phase: A: 0.04M KH₂PO₄ pH 5.5
 B: 0.5M KH₂PO₄TpH 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



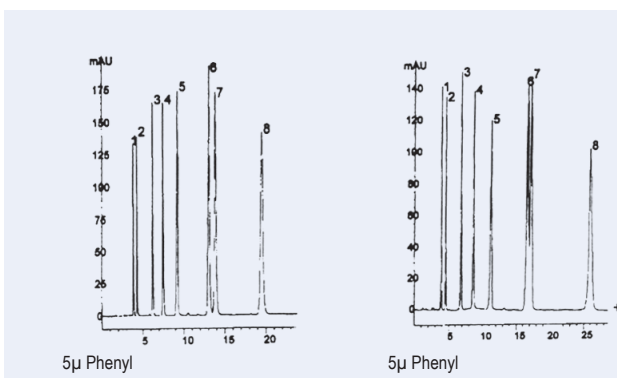
Corticosteroids

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



Aromatic Cetones

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





Tracer Extrasil ^{Tk}

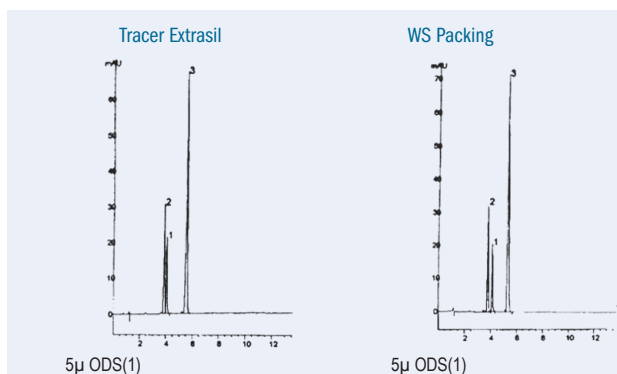
SRM 869

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)
3. Phenantrene (Ph Ph)
3. Tetrabenzonaphtalene

Tracer Extrasil ODS 2 aTBN/BaP = 1,77

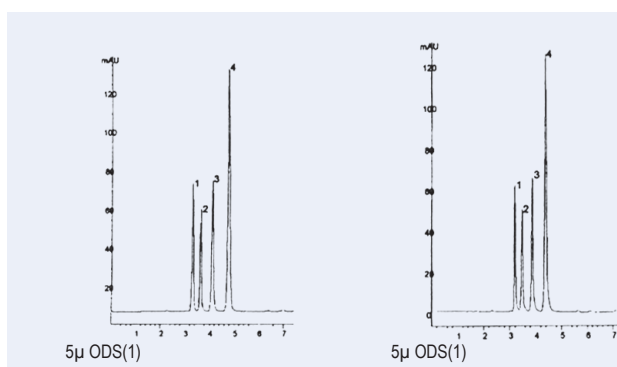
Packing WS ODS-2 aTBN/BaP = 1,70



4-Hidroxi benzoates

Dimensions: 250 x 4.6 mm
Mobil Phase: H₂O:CH₃CN (35:65)
Flow Rate: 1.0mL/min
Detection: UV@ 254nm
Sample:

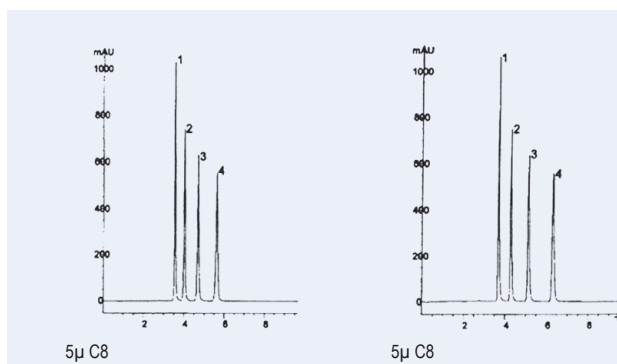
1. Methyl-4-hidroxi benzoate
2. Ethyl-4-hidroxi benzoate
3. Propyl-4-hidroxi benzoate
4. Butyl-4-hidroxi benzoate



4-Hidroxi benzoates

Dimensions: 250 x 4.6 mm
Mobil Phase: H₂O:CH₃CN (45:55)
Flow Rate: 1.0mL/min
Detection: UV@ 254nm
Sample:

1. Methyl- 4-hidroxi benzoate
2. Ethyl-4-hidroxi benzoate
3. Propyl-4-hidroxi benzoate
4. Butyl-4-hidroxi benzoate



Hidrosoluble Vitamines

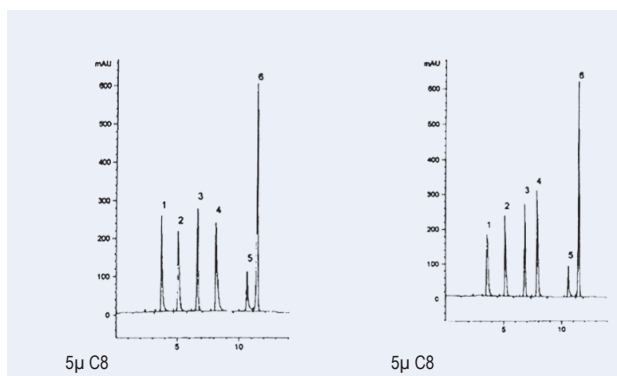
Dimensions: 150 x 4.6 mm
Mobil Phase:

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

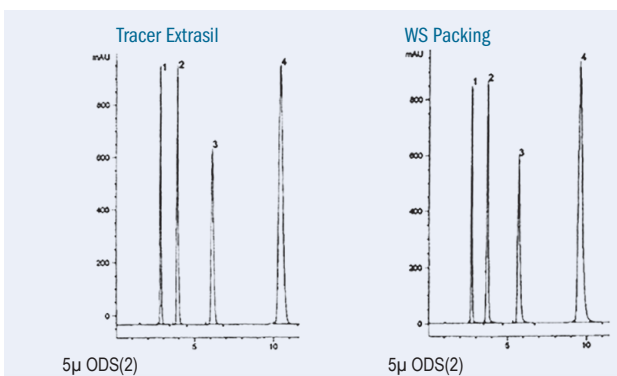
Sample:

1. Nicotinamine
2. Pyridoxal
3. Acide p-amynobenzaic
4. Tyamine
5. Folic Acid
6. Riboflavine



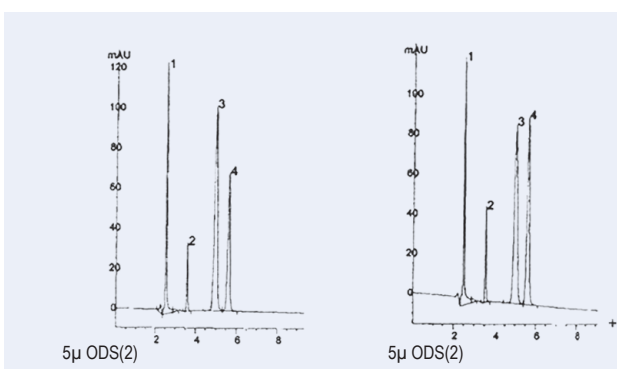
4-Hidroksibenzoat

Dimensions: 150 x 4.6 mm
 Mobil Phase: H₂O:CH₃CN (40:60)
 Flow Rate: 1.0 mL/min
 Temperature: 40°C
 Detection: UV@ 254 nm
 Sample:
 1. Methyl-4-hidroksibenzoat
 2. Ethyl-4-hidroksibenzoat
 3. Propyl-4-hidroksibenzoat
 4. Butyl-4-hidroksibenzoat



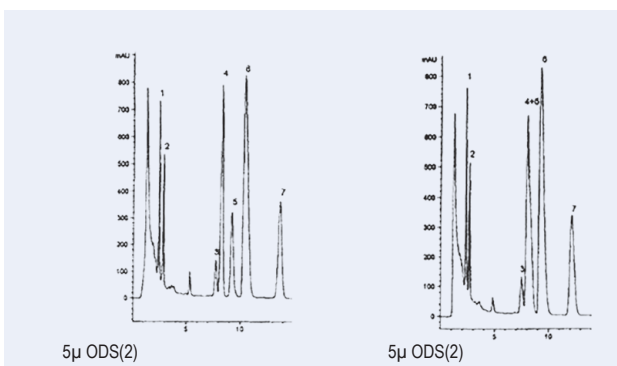
Polar Compounds

Dimensions: 250 x 4.6 mm
 Mobil Phase: 25 mM KH₂PO₄, pH 2.5
 Flow Rate: 1.0 mL/min
 Temperature: 40°C
 Detection: UV@ 230 nm
 Sample:
 1. L-Cysteine
 2. L-ascorbic Acid
 3. Glutathione
 4. Uric Acid



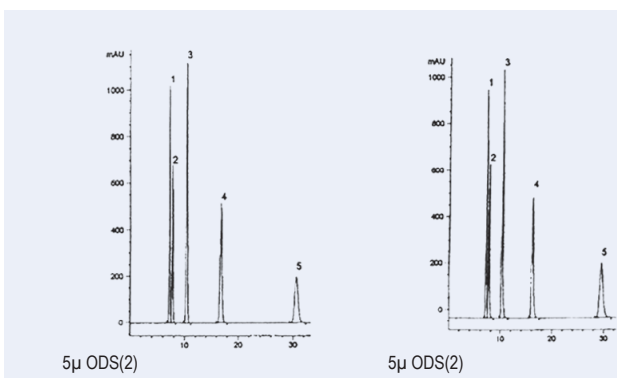
Liposoluble Vitamin

Dimensions: 150 x 4.6 mm
 Mobil Phase: CH₃CN:CH₃OH (75:25)
 Flow Rate: 1.3 mL/min
 Detection: UV@ 280 nm
 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: 1.0 mL/min
 Detection: UV@ 254 nm
 Sample:
 1. Baygon™
 2. Carbofuran
 3. Carbaryl
 4. Prothion
 5. Captan





Tracer Extrasil **TR**

Analytical columns Tracer EXTRASIL

Function		D i m e n s i o n s									
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
C-1	5	TR-016065	TR-416065	TR-016066	TR-416066	TR-016067	TR-416067	TR-016068	TR-416068	TR-016069	TR-416069
C-6	5	TR-016070	TR-416070	TR-016071	TR-416071	TR-016072	TR-416072	TR-016073	TR-416073	TR-016074	TR-416074
C-8	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
C-1	10	TR-016156	TR-416156	TR-016157	TR-416157	TR-016158	TR-416158	TR-016159	TR-416159	TR-016160	TR-416160
C-6	10	TR-016120	TR-416120	TR-016121	TR-416121	TR-016122	TR-416122	TR-016123	TR-416123	TR-016124	TR-416124
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
SCX	10	TR-016146	TR-416146	TR-016147	TR-416147	TR-016148	TR-416148	TR-016149	TR-416149	TR-016150	TR-416150

Ultrarapid columns Tracer EXTRASIL

Function		D i m e n s i o n s									
Particle size (µm)		4 x 0.46 cm	4 x 0.4 cm	10 x 0.46 cm	10 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
ODS 1	3	TR-013200	TR-413200	TR-013201	TR-413201	TR-013202	TR-413202	TR-013203	TR-413203	TR-013204	TR-413204
ODS 2	3	TR-013205	TR-413205	TR-013206	TR-413206	TR-013207	TR-413207	TR-013208	TR-413208	TR-013209	TR-413209
Si	3	TR-013210	TR-413210	TR-013211	TR-413211	TR-013212	TR-413212	TR-013213	TR-413213	TR-013214	TR-413214
C1	3	TR-013215	TR-413215	TR-013216	TR-413216	TR-013217	TR-413217	TR-013218	TR-413218	TR-013219	TR-413219
C6	3	TR-013220	TR-413220	TR-013221	TR-413221	TR-013222	TR-413222	TR-013223	TR-413223	TR-013224	TR-413224
C8	3	TR-013226	TR-413226	TR-013227	TR-413227	TR-013228	TR-413228	TR-013229	TR-413229	TR-013230	TR-413230
CN	3	TR-013231	TR-413231	TR-013232	TR-413232	TR-013233	TR-413233	TR-013234	TR-413234	TR-013235	TR-413235
NH2	3	TR-013236	TR-413236	TR-013237	TR-413237	TR-013238	TR-413238	TR-013239	TR-413239	TR-013240	TR-413240
Phenyl	3	TR-013241	TR-413241	TR-013242	TR-413242	TR-013243	TR-413243	TR-013244	TR-413244	TR-013245	TR-413245

Semi-Preparative columns Tracer EXTRASIL

Function	Particle size (µm)	D i m e n s i o n s			
		15 x 0.7 cm	25 x 0.7 cm	15 x 1.0 cm	25 x 1.0 cm
ODS 1	5	TR-014501	TR-014502	TR-014503	TR-014504
ODS 2	5	TR-014505	TR-014506	TR-014507	TR-014508
Si	5	TR-014509	TR-014510	TR-014511	TR-014512
C - 1	5	TR-014513	TR-014514	TR-014515	TR-014516
C - 6	5	TR-014517	TR-014518	TR-014519	TR-014520
C - 8	5	TR-014521	TR-014522	TR-014523	TR-014524
CN	5	TR-014525	TR-014526	TR-014527	TR-014528
NH2	5	TR-014529	TR-014530	TR-014531	TR-014532
Phenyl	5	TR-014533	TR-014534	TR-014535	TR-014536
SAX	5	TR-014537	TR-014538	TR-014539	TR-014540
SCX	5	TR-014541	TR-014542	TR-014543	TR-014544
ODS 1	10	TR-014545	TR-014546	TR-014547	TR-014548
ODS 2	10	TR-014549	TR-014550	TR-014551	TR-014552
Si	10	TR-014553	TR-014554	TR-014555	TR-014556
C - 6	10	TR-014557	TR-014558	TR-014559	TR-014560
C N	10	TR-014565	TR-014566	TR-014567	TR-014568
NH2	10	TR-014569	TR-014570	TR-014571	TR-014572
Phenyl	10	TR-014573	TR-014574	TR-014575	TR-014576
SAX	10	TR-014577	TR-014578	TR-014579	TR-014580
SCX	10	TR-014581	TR-014582	TR-014583	TR-014584

Microbore columns Tracer EXTRASIL

Function	Particle size (µm)	D i m e n s i o n s			
		10 x 0.21 cm	20 x 0.21 cm	10 x 0.3 cm	20 x 0.3 cm
ODS1	5	TR-021200	TR-021201	TR-021236	TR-021237
ODS2	5	TR-021202	TR-021203	TR-021238	TR-021239
Si	5	TR-021204	TR-021205	TR-021240	TR-021241
C-1	5	TR-021206	TR-021212	TR-021242	TR-021243
C-6	5	TR-021207	TR-021208	TR-021244	TR-021245
C-8	5	TR-021209	TR-021210	TR-021246	TR-021247
CN	5	TR-021211	TR-021213	TR-021248	TR-021249
NH2	5	TR-021214	TR-021215	TR-021250	TR-021251
Phenyl	5	TR-021216	TR-021217	TR-021252	TR-021253
SAX	5	TR-021218	TR-021219	TR-021254	TR-021255
SCX	5	TR-021220	TR-021221	TR-021256	TR-021257

Novafix™ Cartridge Tracer EXTRASIL

Function	Particle size (µm)	D i m e n s i o n s		
		7.5 x 0.4 cm	15 x 0.4 cm	25 x 0.4 cm
ODS1	3	TR-015666	TR-015667	TR-015668
ODS2	3	TR-015669	TR-015670	TR-015671
Si	3	TR-015672	TR-015673	TR-015674
C-1	3	TR-015675	TR-015676	TR-015677
C-6	3	TR-015678	TR-015679	TR-015680
C-8	3	TR-015681	TR-015682	TR-015683
CN	3	TR-015684	TR-015685	TR-015686
NH2	3	TR-015687	TR-015688	TR-015689
Phenyl	3	TR-015690	TR-015691	TR-015692
ODS1	5	TR-015600	TR-015601	TR-015602
ODS2	5	TR-015603	TR-015604	TR-015605
Si	5	TR-015606	TR-015607	TR-015608
C-1	5	TR-015609	TR-015610	TR-015611
C-6	5	TR-015612	TR-015613	TR-015614
C-8	5	TR-015615	TR-015616	TR-015617
CN	5	TR-015618	TR-015619	TR-015620
NH2	5	TR-015621	TR-015622	TR-015623
Phenyl	5	TR-015624	TR-015625	TR-015626
SCX	5	TR-015627	TR-015628	TR-015629
SAX	5	TR-015630	TR-015631	TR-015632
ODS1	10	TR-015633	TR-015634	TR-015635
ODS2	10	TR-015636	TR-015637	TR-015638
Si	10	TR-015639	TR-015640	TR-015641
C-1	10	TR-015642	TR-015643	TR-015644
C-6	10	TR-015645	TR-015646	TR-015647
CN	10	TR-015651	TR-015652	TR-015653
NH2	10	TR-015654	TR-015655	TR-015656
SCX	10	TR-015660	TR-015661	TR-015662
SAX	10	TR-015663	TR-015664	TR-015665

TEKNOKROMA CAN SUPPLY OTHER COMBINATIONS OF DIAMETER AND LENGTH ON APPLICATION