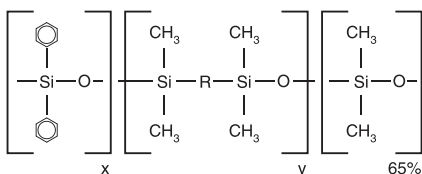


Cannabis Potency Analysis

Rxi®-35Sil MS Structure



similar phases

DB-35ms, DB-35msUI, VF-35ms, MR2

Rxi®-35Sil MS Columns (fused silica)

(midpolarity Crossbond® phase)

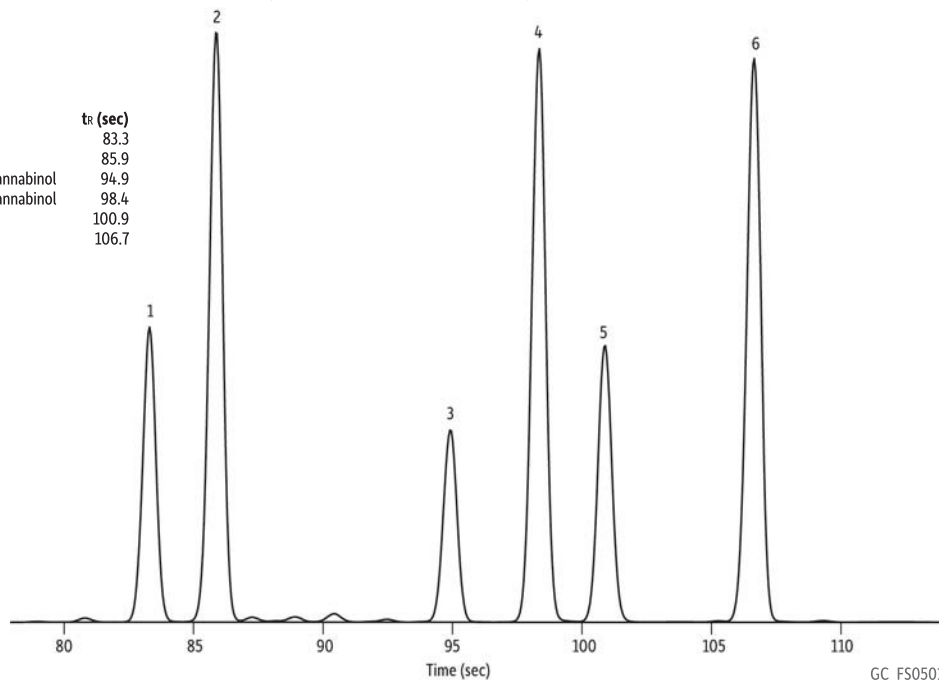
- Special selectivity and excellent inertness for substituted polar compounds, such as drugs, pesticides, herbicides, PCBs, phenols, etc.
- Provides superior separation for cannabinoids.
- Very low-bleed phase for GC-MS analysis.
- Extended temperature range: 50 °C to 340/360 °C.

The higher aromatic content of the Rxi®-35Sil MS column allows for superior separation of cannabinoids over traditional 5-type columns. Baseline separation can be achieved for a comprehensive list of cannabinoids by using a cost-effective 15 m column and readily available hydrogen carrier gas. The arylene content of the Rxi®-35Sil MS stationary phase ensures long column lifetime at the high elution temperatures required for cannabinoids analysis.

ID	df	temp. limits	15-Meter cat.#	30-Meter cat.#
0.25 mm	0.25 µm	50 to 340/360 °C	13820	13823

Cannabinoids on Rxi®-35Sil MS Using Hydrogen Carrier Gas by GC-FID

Peaks	tr (sec)
1. Cannabichromene	83.3
2. Cannabidiol	85.9
3. Delta-8-Tetrahydrocannabinol	94.9
4. Delta-9-Tetrahydrocannabinol	98.4
5. Cannabigerol	100.9
6. Cannabinol	106.7



GC_FS0501

Column Sample Rxi®-35Sil MS, 15 m, 0.25 mm ID, 0.25 µm (cat.# 13820)
Cannabinoids standard (cat.# 34014)
Cannabichromene (cat.# 34092)
delta-8-Tetrahydrocannabinol (THC) (cat.# 34090)
Cannabigerol (cat.# 34091)

Injection
Inj. Vol.: 1 µL split (split ratio 50:1)
Liner: Sky® 4 mm Precision® liner w/wool (cat.# 23305.5)
Inj. Temp.: 250 °C
Split Vent Flow Rate: 125 mL/min

Oven
Oven Temp.: 225 °C (hold 0.1 min) to 330 °C at 35 °C/min (hold 0.9 min)

Carrier Gas
Carrier Gas: H₂, constant flow
Flow Rate: 2.5 mL/min

Detector
Detector: FID @ 350 °C

Constant Column +
Constant Make-up: 50 mL/min
Make-up Gas Type: N₂
Hydrogen flow: 40 mL/min
Air flow: 450 mL/min
Data Rate: 20 Hz

Instrument Agilent/HP6890 GC



FAME Analysis (*cis/trans*)

Rt®-2560 Column (fused silica)

(highly polar phase; biscyanopropyl polysiloxane—not bonded)

- Application-specific column for *cis/trans* FAMEs.
- Stable to 250 °C.

Because the Rt®-2560 stationary phase is not bonded, it should not be solvent rinsed.

similar phases

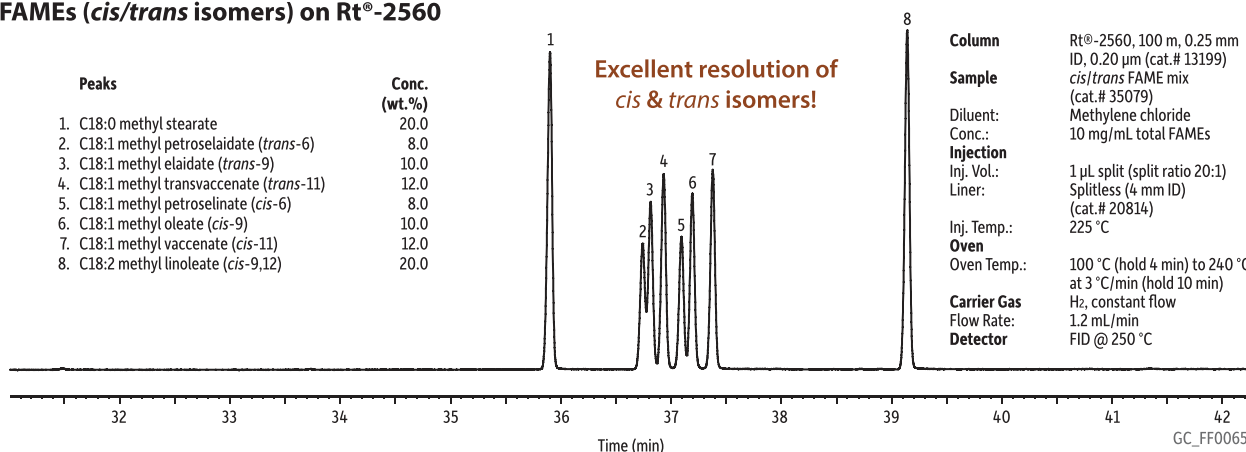
HP-88, CP-Sil 88, SPB-2560

ID	df	temp. limits	100-Meter cat.#
0.25 mm	0.20 µm	20 to 250 °C	13199

FAMEs (*cis/trans* isomers) on Rt®-2560

Peaks	Conc. (wt.%)
1. C18:0 methyl stearate	20.0
2. C18:1 methyl petroselaidate (<i>trans</i> -6)	8.0
3. C18:1 methyl elaidate (<i>trans</i> -9)	10.0
4. C18:1 methyl transvaccenate (<i>trans</i> -11)	12.0
5. C18:1 methyl petroselinic acid (<i>cis</i> -6)	8.0
6. C18:1 methyl oleate (<i>cis</i> -9)	10.0
7. C18:1 methyl vaccenate (<i>cis</i> -11)	12.0
8. C18:2 methyl linoleate (<i>cis</i> -9,12)	20.0

Excellent resolution of *cis* & *trans* isomers!



Column	Rt®-2560, 100 m, 0.25 mm ID, 0.20 µm (cat.# 13199)
Sample	<i>cis/trans</i> FAME mix (cat.# 35079)
Diluent:	Methylene chloride
Conc.:	10 mg/mL total FAMEs
Injection	
Inj. Vol.:	1 µL split (split ratio 20:1)
Liner:	Splitless (4 mm ID) (cat.# 20814)
Inj. Temp.:	225 °C
Oven	
Oven Temp.:	100 °C (hold 4 min) to 240 °C at 3 °C/min (hold 10 min)
Carrier Gas	H ₂ , constant flow
Flow Rate:	1.2 mL/min
Detector	FID @ 250 °C

FAME Analysis (Polyunsaturated)

FAMEWAX Columns (USP G16) (fused silica)

(polar phase; Crossbond® polyethylene glycol)

- Application-specific columns for FAMEs, specially tested with a FAME mixture.
- Temperature range: 20 °C to 250 °C.

The elution order of polyunsaturated FAMEs on FAMEWAX columns is comparable to that on other Carbowax® columns, but baseline resolution is achieved in significantly less time.

ID	df	temp. limits	30-Meter cat.#
0.25 mm	0.25 µm	20 to 240/250 °C	12497
0.32 mm	0.25 µm	20 to 240/250 °C	12498
0.53 mm	0.50 µm	20 to 250 °C	12499

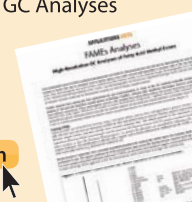
FAMEs Analyses

High-Resolution GC Analyses of Fatty Acid Methyl Esters

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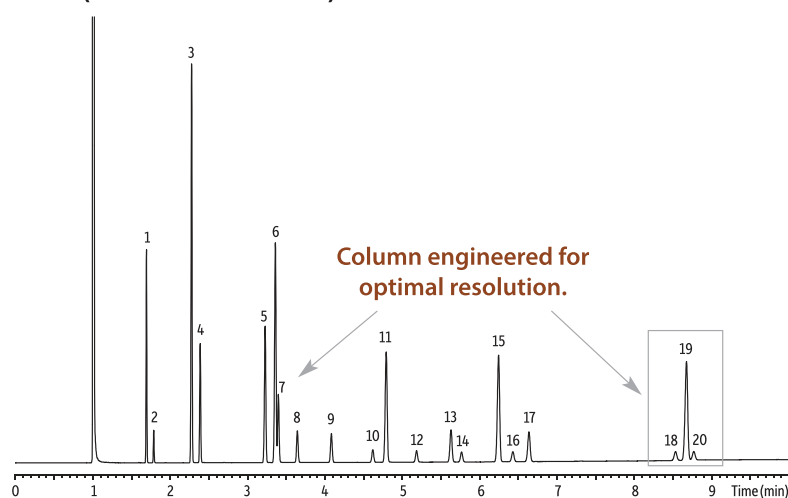
lit. cat.# 59584B



similar phases

Select FAME, Omegawax

FAMEs (Marine Oil Standard) on FAMEWAX



Peaks	Conc. (µg/mL)	10. C20:0	100
1. C14:0	600	11. C20:1	900
2. C14:1	100	12. C20:2	100
3. C16:0	1,600	13. C20:4	300
4. C16:1	500	14. C20:3	100
5. C18:0	800	15. C20:5	1,000
6. C18:1 (oleate)	1,300	16. C22:0	100
7. C18:1 (vaccenate)	400	17. C22:1	300
8. C18:2	200	18. C24:0	100
9. C18:3	200	19. C22:6	1,200
		20. C24:1	100

Column	FAMEWAX, 30 m, 0.32 mm ID, 0.25 µm (cat.# 12498)
Sample	Marine oil FAME mix (cat.# 35066)
Diluent:	Isooctane
Conc.:	10,000 µg/mL (total FAMEs; see breakdown in peak list)
Injection	
Inj. Vol.:	1 µL split (split ratio 100:1)
Inj. Temp.:	250 °C
Oven	
Oven Temp.:	195 °C to 240 °C at 5 °C/min (hold 1 min)
Carrier Gas	H ₂ , constant flow
Flow Rate:	3 mL/min
Detector	FID @ 275 °C

PAHs in Food Analysis

“The Rxi®-PAH column enabled us to separate important PAH derivative isomers, which we were experiencing trouble with for months. This column is excellent for PAH, NPAH, and OPAH separation and I would recommend anyone working in this field to try it out. Thank you Restek!”

Mohammed Salim Alam
Research Fellow
University of Birmingham, UK

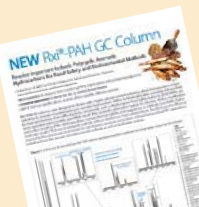
Rxi®-PAH GC Column
Resolve Important Isobaric Polycyclic Aromatic Hydrocarbons for Food Safety and Environmental Methods

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www.restek.com

lit. cat.#

GNTS1718-UNV



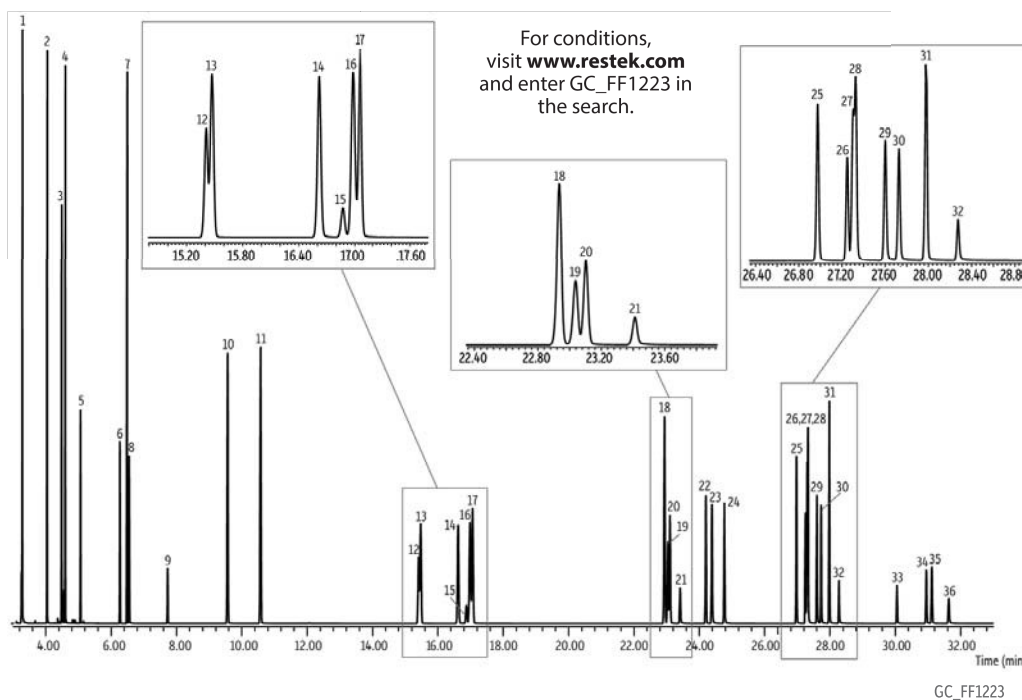
Rxi®-PAH Columns (fused silica)
(midpolarity proprietary phase)

- Ideal for EFSA PAH4 analysis—separates all priority compounds: benz[a]anthracene, chrysene, benzo[b]fluoranthene, and benzo[a]pyrene.
- Best resolution of chrysene from interfering PAHs, triphenylene, and cyclopenta[cd]pyrene.
- Complete separation of benzo [b], [k], [j], and [a] fluoranthenes.
- 360 °C thermal stability allows analysis of low volatility dibenzo pyrenes.

The Rxi®-PAH GC columns were designed by Restek with a higher phenyl-content stationary phase that provides unique selectivity to separate important polycyclic aromatic hydrocarbons (PAH) for food safety that cannot be distinguished by mass spectrometry. Even difficult priority compounds, such as the European Food Safety Authority (EFSA) PAH4, are easily separated and accurately quantified—results that cannot be achieved on typical GC columns. Arylene modification and surface bonding of the stationary phase increase thermal stability and ruggedness so relatively nonvolatile, higher molecular weight PAHs can be analyzed routinely without interference from column bleed. Excellent column efficiency means that the column can be trimmed for maintenance purposes many times without losing critical PAH separations, including those that are part of environmental methods, as well as food safety testing. The selectivity and efficiency of the Rxi®-PAH column make it ideal for EFSA PAH4 analysis; chrysene/triphenylene separation and resolution of all benzofluoranthenes are easily achieved.

ID	df	temp. limits	30-Meter cat.#	price	40-Meter cat.#	60-Meter cat.#
0.18 mm	0.07 µm	to 360 °C			49316	
0.25 mm	0.10 µm	to 360 °C	49318			49317

NIST SRM 2260a PAH Mix on Rxi®-PAH



Peaks

1. Naphthalene
2. Biphenyl
3. Acenaphthylene
4. Acenaphthene
5. Fluorene
6. Dibenzothiophene
7. Phenanthrene
8. Anthracene
9. 4H-Cyclopenta[def]phenanthrene
10. Fluoranthene
11. Pyrene
12. Benzo[ghi]fluoranthene
13. Benzo[c]phenanthrene
14. Benz[a]anthracene
15. Cyclopenta[cd]pyrene
16. Triphenylene
17. Chrysene
18. Benzo[b]fluoranthene
19. Benzo[k]fluoranthene
20. Benzo[j]fluoranthene
21. Benzo[a]fluoranthene
22. Benzo[e]pyrene
23. Benzo[a]pyrene
24. Perylene
25. Dibenz[a,j]anthracene
26. Dibenz[a,c]anthracene
27. Indeno[1,2,3-cd]pyrene
28. Dibenz[a,h]anthracene
29. Benzo[b]chrysene
30. Picene
31. Benzo[ghi]perylene
32. Anthanthrene
33. Dibenzo[b,k]fluoranthene
34. Dibenzo[a,e]pyrene
35. Coronene
36. Dibenzo[a,h]pyrene

Pesticide Analysis in Cannabis

Rxi®-5Sil MS Columns (fused silica)

(low-polarity phase; Crossbond® 1,4-bis(dimethylsiloxy)phenylene dimethyl polysiloxane)

- Engineered to be a low-bleed GC-MS column.
- Excellent inertness for active compounds.
- General-purpose columns—ideal for GC-MS analysis of semivolatiles, polycyclic aromatic compounds, chlorinated hydrocarbons, phthalates, phenols, amines, organochlorine pesticides, organophosphorus pesticides, drugs, solvent impurities, and hydrocarbons.
- Temperature range: -60 °C to 350 °C.

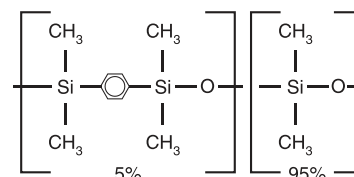
ID	df	temp. limits	30-Meter cat.#
0.25 mm	0.25 µm	-60 to 320/350 °C	13623
	0.50 µm	-60 to 320/350 °C	13638

Rxi®-5Sil MS with Integra-Guard®

- Extend column lifetime.
- Eliminate leaks with a built-in retention gap.
- Inertness verified by isothermal testing.

Description	qty.	cat.#
30 m, 0.25 mm ID, 0.25 µm Rxi-5Sil MS w/5 m Integra-Guard Column	ea.	13623-124
30 m, 0.25 mm ID, 0.50 µm Rxi-5Sil MS w/5 m Integra-Guard Column	ea.	13638-124

Rxi®-5Sil MS Structure



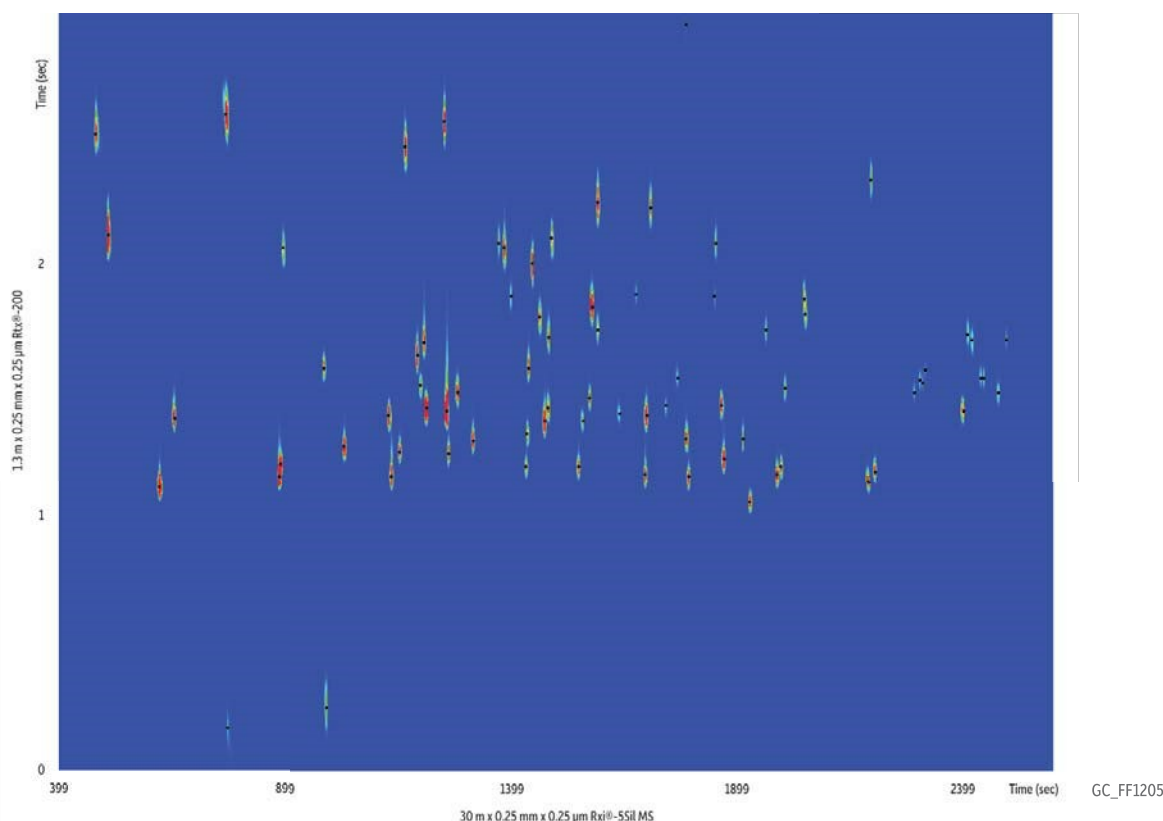
similar phases

DB-5ms, DB-5msUI, VF-5ms, ZB-5ms, ZB-SemiVolatiles, Rtx-5Sil MS

**Growing Analytical
Solutions for Medical
Cannabis Labs**

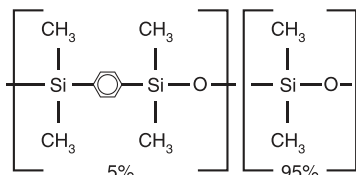
www.restek.com/cannabis

Marijuana Pesticides by GCxGC on Rxi®-5Sil MS and Rtx®-200



Column: Rxi®-5Sil MS 30 m, 0.25 mm ID, 0.25 µm (cat.# 13623); Rtx®-200 1.3 m, 0.25 mm ID, 0.25 µm (cat.# 15020); **Sample:** Diluent: Toluene; **Injection:** Inj. Vol.: 1 µL splitless (hold 1 min); Liner: Sky® 4 mm single taper w/wool (cat.# 23303.1); **Inj. Temp.:** 250 °C; **Purge Flow:** 40 mL/min; **Oven:** Oven Temp.: Rxi®-5Sil MS: 80 °C (hold 1 min) to 310 °C at 5 °C/min; Rtx®-200: 85 °C (hold 1 min) to 315 °C at 5 °C/min; **Carrier Gas:** He, corrected constant flow (2 mL/min); **Modulation:** Modulator Temp. Offset: 20 °C; Second Dimension Separation Time: 3 sec; Hot Pulse Time: 0.9 sec; Cool Time between Stages: 0.6 sec; **Detector:** TOFMS; Transfer Line Temp.: 290 °C; Analyzer Type: TOF; Source Temp.: 225 °C; Electron Energy: 70 eV; Mass Defect: -20 mu/100 u; Solvent Delay Time: 5 min; Tune Type: PFTBA; Ionization Mode: EI; Acquisition Range: 45-550 amu; Spectral Acquisition Rate: 100 spectra/sec; **Instrument:** LECO Pegasus 4D GCxGC-TOFMS; **Notes:** Rtx®-200 (cat.# 15020) is a 15 m column. A 1.3 m section was used as the second dimension column.

For a peak list, visit www.restek.com and enter chromatogram GC_FF1205 in the search function.

Rxi®-5Sil MS Structure

Similar to: (5%-phenyl)-methylpolysiloxane

similar phases

DB-5ms, DB-5msUI, VF-5ms, ZB-5ms, ZB-SemiVolatiles, Rtx-5Sil MS

also available

Comprehensive 203-compound GC multiresidue pesticide kit



See page 568.

Pesticide Residues in Food Analysis**Rxi®-5Sil MS Columns** (fused silica)

(low-polarity phase; Crossbond® 1,4-bis(dimethylsiloxy)phenylene dimethyl polysiloxane)

- Engineered to be a low-bleed GC-MS column.
- Excellent inertness for active compounds.
- General-purpose columns—ideal for GC-MS analysis of semivolatiles, polycyclic aromatic compounds, chlorinated hydrocarbons, phthalates, phenols, amines, organochlorine pesticides, organophosphorus pesticides, drugs, solvent impurities, and hydrocarbons.
- Temperature range: -60 °C to 350 °C.

The Rxi®-5Sil MS stationary phase incorporates phenyl groups in the polymer backbone. This improves thermal stability, reduces bleed, and makes the phase less prone to oxidation. Rxi®-5Sil MS columns are ideal for GC-MS applications requiring high sensitivity, including use in ion trap systems.

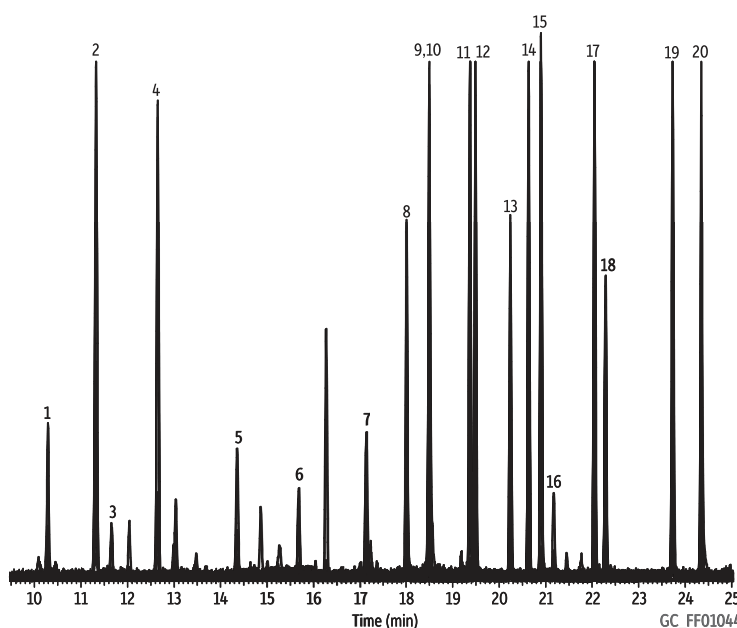
ID	df	temp. limits	15-Meter cat.#	30-Meter cat.#	60-Meter cat.#
0.25 mm 0.10 µm		-60 to 320/350 °C	13605	13608	
	0.25 µm	-60 to 320/350 °C	13620	13623	13626
	0.50 µm	-60 to 320/350 °C	13635	13638	
	1.00 µm	-60 to 320/350 °C	13650	13653	13697
0.32 mm 0.25 µm		-60 to 320/350 °C	13621	13624	
	0.50 µm	-60 to 320/350 °C		13639	
	1.00 µm	-60 to 320/350 °C		13654	
0.53 mm 1.50 µm		-60 to 320/330 °C		13670	

ID	df	temp. limits	10-Meter cat.#	20-Meter cat.#	40-Meter cat.#	60-Meter cat.#
0.15 mm 0.15 µm		-60 to 320/350 °C	43815	43816		
	2.0 µm	-60 to 320/350 °C		43817		
0.18 mm 0.10 µm		-60 to 320/350 °C				43607
	0.18 µm	-60 to 320/350 °C		43602	43605	
	0.36 µm	-60 to 320/350 °C		43604		

Chlorinated Pesticide Residues in Olive Oil on Rxi®-5Sil MS

Column Rxi®-5Sil MS 30 m, 0.25 mm ID, 0.25 µm (cat.# 13623)
Sample Olive oil spiked with organochlorine pesticide mix AB # 3 (cat.# 32415)
Conc.: 10 µg/mL
Injection
 Inj. Vol.: 1 µL splitless (hold 0.5 min)
 Liner: Single taper w/wool (cat.# 22286-200.1)
 Inj. Temp.: 225 °C
Oven
 Oven Temp.: 130 °C (hold 0.5 min) to 330 °C at 5 °C/min
Carrier Gas He, constant flow
 Flow Rate: 1 mL/min
Detector MS
 Mode: SIM
 Transfer Line
 Temp.: 320 °C
 Ionization Mode: EI

Notes
Extraction and dSPE Cleanup for Pesticide Residues in Olive Oil
 Test sample: A 1.5 mL sample of commercially obtained virgin olive oil was spiked with a standard organochlorine pesticide mix. The spiked sample was processed as follows.
 1. Dilute with 1.5 mL hexane.
 2. Add 6 mL of acetonitrile (ACN).
 3. Mix for 30 minutes on a shaker.
 4. Allow layers to separate (approximately 20 minutes), then collect the top (ACN) layer.
 5. Repeat the liquid-liquid extraction (steps 2-4) and combine both ACN extract layers.
 6. Place 1 mL of the combined ACN extract in a 1.5 mL tube containing 150 mg magnesium sulfate and 50 mg PSA.
 7. Shake the tube for 2 minutes.
 8. Centrifuge at 3,000 U/min for approximately 5 minutes.
 9. Remove the top layer and inject directly into the gas chromatograph system.



For peak list, visit www.restek.com and enter GC_FF01044 in the search

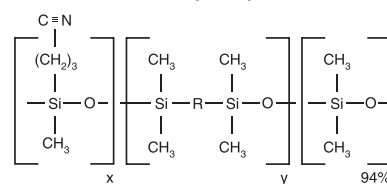
Residual Solvent Analysis for Cannabis Concentrates

Rxi®-624Sil MS Columns (fused silica)

(midpolarity Crossbond® phase)

- Low-bleed, high-thermal stability column—maximum temperatures up to 320 °C.
- Inert—excellent peak shape for a wide range of compounds.
- Selective—G43 phase highly selective for volatile organics and residual solvents, great choice for USP<467>.
- Manufactured for column-to-column reproducibility—well-suited for validated methods.

Rxi®-624Sil MS (G43) Structure



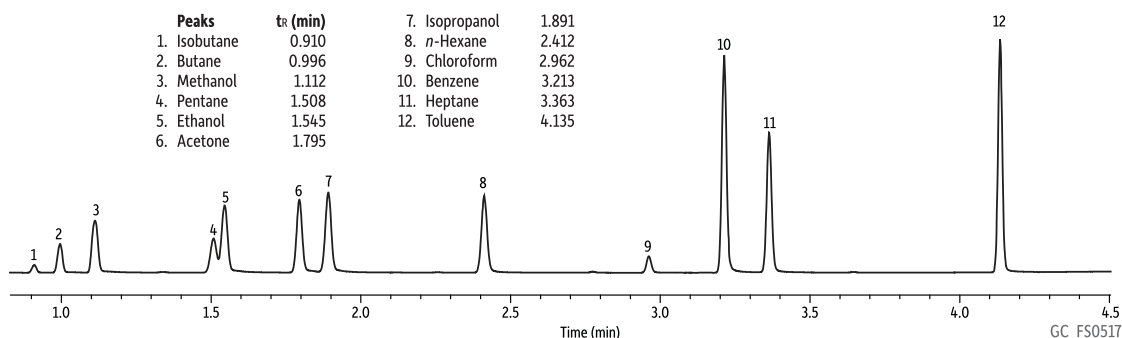
Similar to: (6%-cyanopropylphenyl)-methylpolysiloxane

similar phases

DB-624, VF-624ms, CP-Select 624 CB

ID	df	temp. limits	20-Meter cat.#	30-Meter cat.#	60-Meter cat.#	75-Meter cat.#	105-Meter cat.#
0.18 mm	1.00 µm	-20 to 300/320 °C	13865				
0.25 mm	1.40 µm	-20 to 300/320 °C		13868	13869		
0.32 mm	1.80 µm	-20 to 300/320 °C		13870	13872		
0.53 mm	3.00 µm	-20 to 280/300 °C		13871	13873	13874	13875

Residual Solvents in Cannabis Concentrates on Rxi®-624Sil MS by Headspace–Full Evaporation Technique (HS-FET)



Column Rxi®-624Sil MS, 30 m, 0.25 mm ID, 1.40 µm (cat.# 13868)
Sample Residual solvent mix
Diluent: Dimethyl sulfoxide (DMSO)
Conc.: 500 ppm (For the HS-FET technique, 10 µL of a 1,000 µg/mL standard was placed into a 20 mL headspace vial to represent a 500 ppm sample concentration, assuming a 20 mg sample.)
Injection headspace-loop split (split ratio 10:1)
Liner: Sky® 1.0 mm ID straight inlet liner (cat.# 23333.1)
Headspace-Loop
Instrument: Tekmar HT3
Inj. Time: 1.0 min
Transfer Line Temp.: 160 °C
Valve Oven Temp.: 160 °C
Needle Temp.: 140 °C
Sample Temp.: 140 °C
Platen temp
equil. time: 1.0 min
Sample Equil. Time: 30.0 min
Vial Pressure: 20 psi
Pressurize Time: 5.0 min
Loop Pressure: 15 psi
Loop Fill Time: 2.0 min

Oven
Oven Temp.: 35 °C (hold 1.5 min) to 300 °C at 30 °C/min (hold 2.0 min)
Carrier Gas He, constant flow
Linear Velocity: 80 cm/sec
Detector FID @ 250 °C
Make-up Gas
Flow Rate: 45 mL/min
Make-up Gas Type: N₂
Hydrogen flow: 40 mL/min
Air flow: 450 mL/min
Data Rate: 20 Hz
Instrument Agilent/HP6890 GC

Notes
 The butane used for standard preparation was a mixture of butane and isobutane in an unknown ratio. The concentrations of butane and isobutane should be considered approximate, but do not exceed 500 ppm for either component.

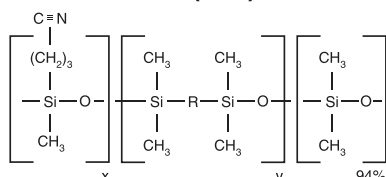
ChromaBLOGraphy

Check out the Restek blog for the most current topics in chromatography.

blog.restek.com

Terpenes Analysis for Cannabis and Hops

Rxi®-624Sil MS (G43) Structure



Similar to: (6%-cyanopropylphenyl)-methylpolysiloxane

similar phases

DB-624, VF-624ms, CP-Select 624 CB

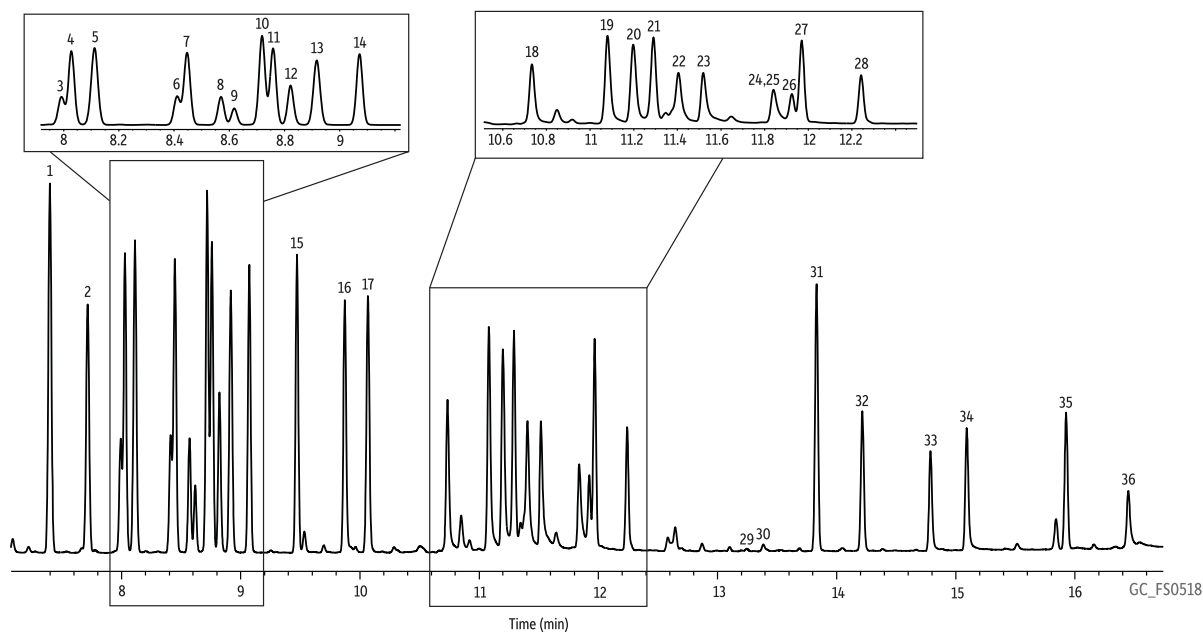
Rxi®-624Sil MS Columns (fused silica)

(midpolarity Crossbond® phase)

- Low-bleed, high-thermal stability column—maximum temperatures up to 320 °C.
- Inert—excellent peak shape for a wide range of compounds.
- Selective—G43 phase highly selective for volatile organics and residual solvents, great choice for USP<467>.
- Manufactured for column-to-column reproducibility—well-suited for validated methods.

ID	df	temp. limits	20-Meter cat.#	30-Meter cat.#	60-Meter cat.#	75-Meter cat.#	105-Meter cat.#
0.18 mm	1.00 µm	-20 to 300/320 °C	13865				
0.25 mm	1.40 µm	-20 to 300/320 °C		13868	13869		
0.32 mm	1.80 µm	-20 to 300/320 °C		13870	13872		
0.53 mm	3.00 µm	-20 to 280/300 °C		13871	13873	13874	13875

Medical Cannabis Terpenes on Rxi®-624Sil MS by FET-HS-GC



Peaks	tr (min)	10. Limonene	8.71	20. Borneol	11.19	30. Citral 4	13.43
1. α-Pinene	7.39	11. p-Cymene	8.75	21. α-Terpineol	11.29	31. β-caryophyllene	13.83
2. Camphene	7.71	12. β-Ocimene	8.82	22. Dihydrocarveol	11.40	32. α-Humulene	14.21
3. β-Myrcene	7.98	13. Eucalyptol	8.91	23. Citronellol	11.51	33. Nerolidol 1	14.78
4. Sabinene	8.02	14. γ-Terpinene	9.06	24. Geraniol	11.82	34. Nerolidol 2	15.08
5. β-Pinene	8.11	15. Terpinolene	9.47	25. 2-Piperidinone	11.88	35. Caryophyllene oxide	15.92
6. α-Phellandrene	8.4	16. Linalool	9.87	26. Citral 1	11.92	36. α-Bisabolol	16.43
7. δ-3-Carene	8.44	17. Fenchone	10.06	27. Pulegone	11.97		
8. α-Terpinene	8.57	18. Isopulegol	10.73	28. Citral 2	12.24		
9. Ocimene	8.61	19. dl-Menthol	11.08	29. Citral 3	13.19		

Column Rxi® -624Sil MS, 30 m, 0.25 mm ID, 1.40 µm (cat.# 13868)

Sample Terpenes mix

Diluent: Isopropyl alcohol

Conc.: 200 ng/µL (0.02% wt/vol). The sample was prepared by placing 10 µL into the headspace vial.

Injection headspace-loop split (split ratio 10:1)

Liner: Sky® 1.0 mm ID straight inlet liner (cat.# 23333.1)

Headspace-Loop

Inj. Port Temp.: 250 °C

Instrument: Tekmar HT-3

Inj. Time: 1.0 min

Transfer Line Temp.: 160 °C

Valve Oven Temp.: 160 °C

Needle Temp.: 140 °C

Sample Temp.: 140 °C

Sample Equil. Time: 30.0 min

Vial Pressure: 20 psi

Loop Pressure: 15 psi

Oven

Oven Temp.: 60 °C (hold 0.10 min) to 300 °C at 12.50 °C/min (hold 3.0 min)

Carrier Gas He, constant flow

Linear Velocity: 33 cm/sec

Detector FID @ 320 °C

Make-up Gas

Flow Rate: 45 mL/min

Make-up Gas Type: N₂

Hydrogen flow: 40 mL/min

Air flow: 450 mL/min

Data Rate: 20 Hz

Instrument Agilent/HP6890 GC



Triglycerides in Foods Analysis

Rtx®-65TG Columns (fused silica)

(high-polarity phase; Crossbond® diphenyl dimethyl polysiloxane)

- Application-specific columns, specially tested for triglycerides.
- Stable to 370 °C.

The Rtx®-65TG phase resolves triglycerides by degree of unsaturation as well as by carbon number. Because of the chemistry required to achieve 370 °C thermal stability, an Rtx®-65TG column should not be used for the analyses of polar compounds.

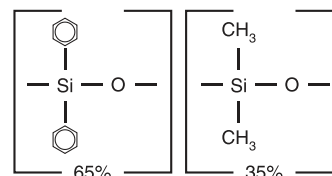
ID	df	temp. limits	15-Meter cat.#	30-Meter cat.#
0.25 mm	0.10 µm	40 to 370 °C	17005	17008
0.32 mm	0.10 µm	40 to 370 °C	17006	17009
0.53 mm	0.10 µm	40 to 370 °C	17007	17010

please note

Triglycerides are often injected via on-column injection. Use 0.53 mm retention gaps and appropriate connectors.

- Vu2 Union® connectors (see page 229.)
- MXT®-Union connector kits for fused silica (see page 231.)

Rtx®-65TG Structure

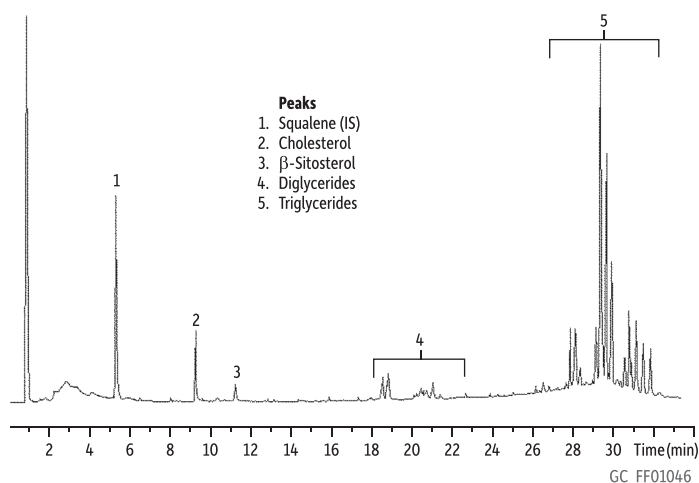


Similar to: (65%-phenyl)-methylpolysiloxane

crossbond® technology

Reduces bleed, prolongs column lifetime, and allows rejuvenation through solvent rinsing.

Egg Pasta Sterols & Glycerides on Rtx®-65TG



Column Rtx®-65TG, 30 m, 0.25 mm ID, 0.10 µm (cat.# 17008)
Sample Fat extract from egg pasta in diethyl ether solution with 3,000 ppm squalene (IS)
Conc.: 50 µg/mL
Injection
 Inj. Vol.: 0.5 µL pvtv split (split ratio 80:1)
 Inlet Temp. Program: 70 °C (hold 12 min) to 370 °C at 99 °C/min (hold 5 min)
Oven
 Oven Temp.: 220 °C (hold 2 min) to 360 °C at 5 °C/min (hold 5 min)
Carrier Gas H₂, constant flow
Flow Rate: 1.5 mL/min
Detector FID @ 370 °C

Acknowledgement

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