

Thermo Scientific TraceGOLD GC Columns

TraceGOLD GC columns offer you a leap forward in column performance delivering low bleed and superior inertness ideally suited to MS applications.



View product information
and application notes

Quick Reference

TG-1MS	3-023	TG-17SiIMS	3-039
TG-XLBMS	3-024	TG-225MS	3-040
TG-5MS	3-025	TG-200MS	3-041
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TraceGOLD TG-1MS GC Columns

Exceptionally low bleed for optimal signal-to-noise ratio, sensitivity and MS integrity

- Non-polar, 100% Methylpolysiloxane
- Equivalent to USP G2

	
Phase:	100% Dimethyl Polysiloxane
Max. Temps.:	330°C/350°C
USP Listing:	G2

TraceGOLD TG-1MS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.1	10	0.1	26099-0200	1 Each
0.2	12	0.33	26099-5820	1 Each
0.25	15	0.25	26099-1300	1 Each
		0.5	26099-2110	1 Each
		1.0	26099-2840	1 Each
	30	0.25	26099-1420	1 Each
		0.5	26099-2230	1 Each
		1.0	26099-2960	1 Each
	60	0.25	26099-1540	1 Each
		0.5	26099-2350	1 Each
		1.0	26099-3080	1 Each
0.32	15	0.25	26099-1310	1 Each
		1.0	26099-2850	1 Each
		3.0	26099-3500	1 Each
	30	0.25	26099-1430	1 Each
		0.5	26099-2240	1 Each
		1.0	26099-2970	1 Each
	60	3.0	26099-4840	1 Each
		0.25	26099-1550	1 Each
		0.5	26099-2360	1 Each
0.53	15	1.0	26099-3090	1 Each
	30	0.5	26099-2130	1 Each
		1.0	26099-2860	1 Each
	60	1.5	26099-3340	1 Each
		0.5	26099-2250	1 Each
		1.0	26099-2980	1 Each
	180	1.5	26099-3360	1 Each

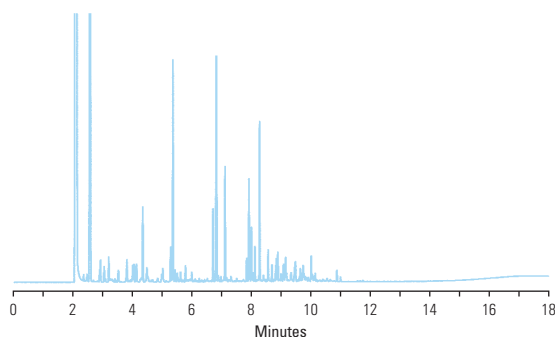
Applications:

- Hydrocarbons
- PCBs
- Drugs of abuse
- Gasoline range organics (GRO)
- Refinery gases
- Essential oils
- Pesticides

Similar to:

- Rxi-1ms
- DB-1
- DB-1ms
- HP-1
- HP-1ms
- Ultra-1
- SPB-1
- Equity-1
- VF-1ms
- CP-Sil 5 CB Low Bleed/MS

Unleaded gasoline



Column: TG-1MS 30m x 0.25mm x 0.25µm

Part Number: 26099-1420

Temperature: 50°C (2.0 minute hold) to 75°C at 10°C/minute to 300°C at 20°C/minute (5 minute hold)

Detector Type: FID

Carrier Gas: He

Flow Rate: 1.0mL/min

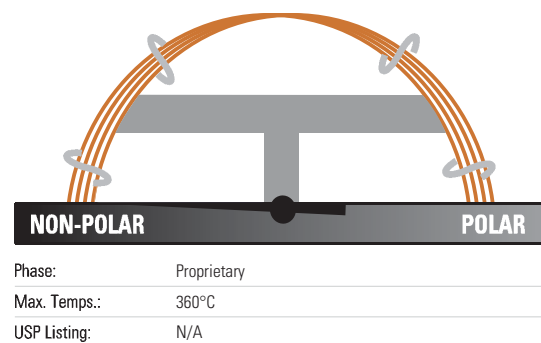
Injection Volume: 1.0µL

Injection Mode: Split (20:1), 250°C

TraceGOLD TG-XLBMS GC Columns

General purpose columns exhibiting extremely low bleed

- Low polarity phase, proprietary
- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Ideal for analysis of active, high molecular weight compounds with sensitive GC-MS systems



TraceGOLD TG-XLBMS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.10	10	0.1	26079-0200	1 Each
0.18	20	0.18	26079-5780	1 Each
0.25	15	0.1	26079-0350	1 Each
		0.25	26079-1300	1 Each
		1.0	26079-2840	1 Each
		0.1	26079-0470	1 Each
	30	0.25	26079-1420	1 Each
		0.5	26079-2230	1 Each
		1.0	26079-2960	1 Each
		0.25	26079-1540	1 Each
0.32	15	0.25	26079-1310	1 Each
		0.1	26079-0480	1 Each
		0.25	26079-1430	1 Each
		0.5	26079-2240	1 Each
	30	1.0	26079-2970	1 Each
		0.25	26079-1550	1 Each
	60	0.25	26079-1550	1 Each
		0.25	26079-1550	1 Each
0.53	15	1.5	26079-3340	1 Each
	30	0.5	26079-2250	1 Each
		1.5	26079-3360	1 Each

Applications

- Pesticides
- PCB congeners
- PAHs
- Aroclor mixes

Similar to:

- Rxi-XLB
- DB-XLB
- VF-Xms

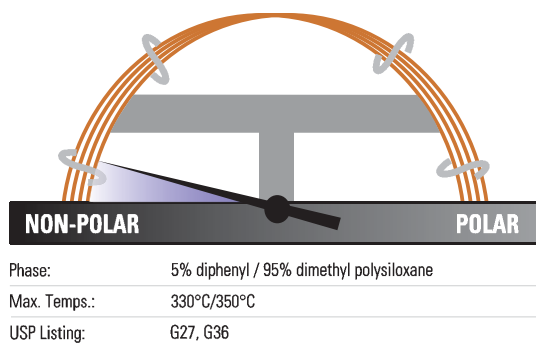
Semi-Volatile Drinking Water Application Kit

Description	Cat. No.	Quantity
Semi-Volatile Drinking Water Application Kit	60181-736	1 Each
Containing the following:		
TraceGOLD TG-XLBMS GC Column 30m x 0.25mm x 0.25µm	26079-1420	1 Each
BTO Septa 17mm Diameter	31303211	50 Pack
S/SL Injector – Split/Splitless Liner, 5mm ID x 8mm OD x 105mm Length	45350033	5 Pack
S/SL Injector – Silver Seals	29033629	10 Pack
S/SL Injector – Graphite Liner Seals	29033406	10 Pack
S/SL Injector – Graphite Ferrules for 0.25mm ID Column	29053488	10 Pack
MS Interface – Graphite/Vespel Ferrules for 0.25mm ID Column	29033496	10 Pack
2mL Screw Top Vials, Amber Glass	60180-567	100 Pack
Blue Caps With PTFE/Red Rubber Seals	60180-569	100 Pack
5µL Fixed Needle Syringe, 50mm Length, 26 Gauge, Cone Needle	36500505	1 Each

TraceGOLD TG-5MS GC Columns

The most widely used MS phase in gas chromatography

- Low polarity phase, 5% Phenyl Methylpolysiloxane
- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Exceptional inertness ideal for analysis of active compounds
- Equivalent to USP G27 phase



TraceGOLD TG-5MS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.1	10	0.1	26098-0200	1 Each
0.2	12	0.33	26098-5820	1 Each
0.18	20	0.18	26098-5780	1 Each
0.25	10	0.25	26098-1180	1 Each
		0.25	26098-1300	1 Each
		0.5	26098-2110	1 Each
		1.0	26098-2840	1 Each
	30	0.25	26098-1420	1 Each
		0.5	26098-2230	1 Each
		1.0	26098-2960	1 Each
	60	0.25	26098-1540	1 Each
		0.5	26098-2350	1 Each
		1.0	26098-3080	1 Each
0.32	15	0.25	26098-1310	1 Each
		1.0	26098-2850	1 Each
	30	0.25	26098-1430	1 Each
		0.5	26098-2240	1 Each
		1.0	26098-2970	1 Each
	60	0.25	26098-1550	1 Each
		0.5	26098-2360	1 Each
		1.0	26098-3090	1 Each
	0.53	0.25	26098-1320	1 Each
		0.5	26098-2130	1 Each
	15	1.0	26098-2860	1 Each
		1.5	26098-3340	1 Each
	30	0.25	26098-1440	1 Each
		0.5	26098-2250	1 Each
		1.0	26098-2980	1 Each
		1.5	26098-3360	1 Each
	60	5.0	26098-4100	1 Each

Applications:

- Semi-volatiles
- Phenols
- Amines
- Residual solvents and solvent impurities
- Drugs of abuse
- Pesticides
- PCB congeners
- Aroclor mixes

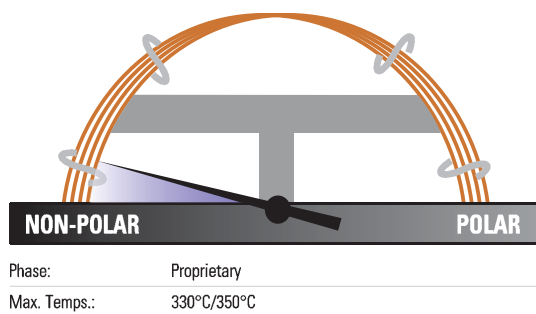
Similar to:

- Rxi-5ms
- DB-5
- HP-5
- HP-5ms
- Ultra-2
- SPB-5
- Equity-5
- CP-Sil 8

TraceGOLD TG-SQC GC Columns

Ensure the quality of a Thermo Scientific instrument when installed on site

- Optimized for system qualification tests for new GC-MS installations or during service/maintenance of an existing instrument
- We recommend reserving this column for benchmark testing only



TraceGold TG-SQC GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.25	26070-1300	1 Each
	30	0.25	26070-1420	1 Each

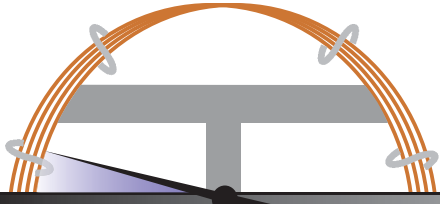
Applications:

- System Qualification Tests (Thermo Scientific GC-MS)

TraceGOLD TG-5MS AMINE GC Columns

Analysis of ppm levels of amines without column priming

- Low polarity phase, base optimized 5% phenyl methylpolysiloxane
- Tubing surface is chemically altered to reduce tailing of active basic compounds
- Also allows analysis of neutral or weakly acidic compounds (e.g., phenols) and compounds susceptible to hydrogen bonding
- Low bleed at maximum operating temperature

	
Phase:	Modified 5% Phenyl Methylpolysiloxane for Basic Compounds
Max. Temps.:	300°C / 315°C
USP Listing:	N/A

TraceGOLD TG-5MS AMINE GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.25	15	0.25	26097-1300	1 Each
		0.5	26097-2110	1 Each
		1.0	26097-2840	1 Each
	30	0.25	26097-1420	1 Each
		0.5	26097-2230	1 Each
		1.0	26097-2960	1 Each
0.32	15	1.0	26097-2850	1 Each
	30	1.0	26097-2970	1 Each
0.53	15	1.0	26097-2860	1 Each
		3.0	26097-3840	1 Each
	30	1.0	26097-2980	1 Each
		3.0	26097-3960	1 Each

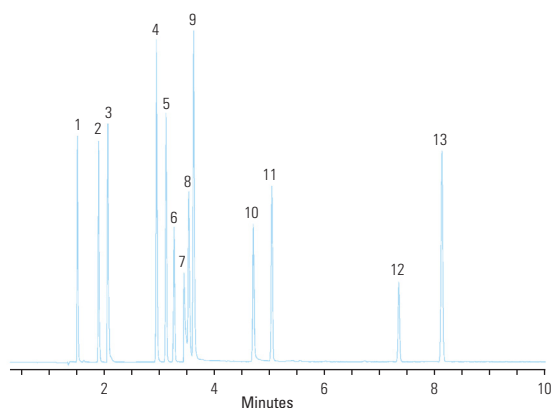
Applications:

- Amines and other basic compounds, including alkylamines, diamines, triamines, ethanolamines
- Nitrogen-containing heterocyclics

Similar to:

- Rtx-5 Amine

Amines and phenols



Column: TG-5MS Amine 30m x 0.32mm x 1.0μm

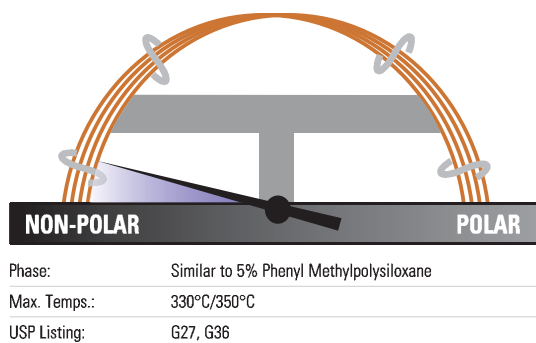
Part Number:	26097-2970
Temperature:	120°C to 220°C at 10°C/minute
Detector Type:	FID
Carrier Gas:	Hydrogen
Flow Rate:	40cm/min
Injection Volume:	1.0μL
Injection Mode:	Split 25:1, 300°C

- | | |
|-----------------------|---------------------------|
| 1. diethylamine | 8. octylamine |
| 2. pyridine | 9. 1-methyl-2-pyrrolidone |
| 3. morpholine | 10. 2-nitrophenol |
| 4. phenol | 11. 2,6-dimethylaniline |
| 5. aniline | 12. nicotine |
| 6. 2-chlorophenol | 13. 2-nitroaniline |
| 7. diethylenetriamine | |

TraceGOLD TG-5SiIMS GC Columns

Incorporate phenyl groups in the polymer backbone for improved thermal stability, reduced bleed and reduced susceptibility to oxidation

- Low polarity, silarylene phase with selectivity comparable to 5% phenyl methylpolysiloxane
- Designed for low bleed and outstanding inertness



TraceGOLD TG-5SiIMS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.1	10	0.1	26096-0200	1 Each
0.18	20	0.18	26096-5780	1 Each
0.2	12	0.33	26096-5820	1 Each
0.25	15	0.25	26096-1300	1 Each
		0.5	26096-2110	1 Each
		1.0	26096-2840	1 Each
	30	0.25	26096-1420	1 Each
		0.5	26096-2230	1 Each
		1.0	26096-2960	1 Each
	60	0.25	26096-1540	1 Each
		1.0	26096-3080	1 Each
0.32	15	0.25	26096-1310	1 Each
	30	0.25	26096-1430	1 Each
		0.5	26096-2240	1 Each
		1.0	26096-2970	1 Each
0.53	30	1.5	26096-3360	1 Each

Semi-Volatile Waste / Wastewater Application Kit

Description	Cat. No.	Quantity
Semi-Volatile Waste / Wastewater Application Kit	60181-735	1 Each
Containing the following:		
TraceGOLD TG-5SiIMS GC Column 30m x 0.25mm x 0.50µm	26096-2230	1 Each
BTO Septa 17mm Diameter	31303211	50 Pack
S/SL Injector – Split/Splitless Liner, 5mm ID x 8mm OD x 105mm Length	45350033	5 Pack
S/SL Injector – Silver Seals	29033629	10 Pack
S/SL Injector – Graphite Liner Seals	29033406	10 Pack
S/SL Injector – Graphite Ferrules for 0.25mm ID Column	29053488	10 Pack
MS Interface – Graphite/Vespel Ferrules for 0.25mm ID Column	29033496	10 Pack
2mL Screw Top Vials, Amber Glass	60180-567	100 Pack
Blue Caps With PTFE/Red Rubber Seals	60180-569	100 Pack
5µL Fixed Needle Syringe, 50mm Length, 26 Gauge, Cone Needle	36500505	1 Each

Applications:

- GC-MS applications using ion-trap systems
- Polycyclic aromatics
- Hydrocarbons including chlorinated hydrocarbons
- Phthalates
- Phenols
- Amines
- Organophosphate

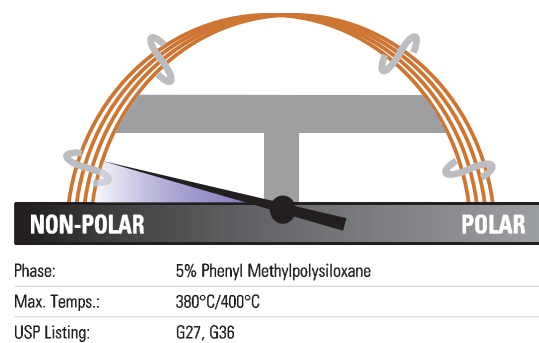
Similar to:

- DB-5MS
- VF-5ms
- CP-Sil 8 Low-Bleed/MS
- Rxi-5SiIMS
- BPX5
- ZB-5ms
- Optima-5MS
- SLB-5

TraceGOLD TG-5HT GC Columns

Offers extended operation up to 400°C, ideal for high temperature extended GC applications

- Low polarity, 5% phenyl methylpolysiloxane phase
- Lower bleed and better inertness than comparable high-temperature columns
- Special design of fused silica tubing extends column lifetime by up to 40%



TraceGOLD TG-5HT GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.1	26095-0350	1 Each
		0.25	26095-1300	1 Each
	30	0.1	26095-0470	1 Each
		0.25	26095-1420	1 Each
0.32	15	0.1	26095-0360	1 Each
	30	0.1	26095-0480	1 Each
		0.25	26095-1430	1 Each
0.53	10	0.15	26095-1640	1 Each
	30	0.15	26095-0620	1 Each

PBDE (Environmental) Application Kit

Description	Cat. No.	Quantity
PBDE (Environmental) Application Kit	60181-737	1 Each
Containing the following:		
TraceGOLD TG-5HT GC Column 15m x 0.25mm x 0.10µm	26095-0350	1 Each
BTO Septa 12.7mm Diameter	31303228	50 Pack
PTV Injector – Deactivated Glass Baffle Liner, 2mm ID x 2.75mm OD x 120mm Length	453T1001	5 Pack
PTV Injector – Graphite Liner Seals	29013417	2 Pack
PTV Injector – Graphite Ferrules for 0.25mm ID Column	29053488	10 Pack
MS Interface – Graphite/Vespel Ferrules for 0.25mm ID Column	29033496	10 Pack
2mL Screw Top Vials, Amber Glass	60180-567	100 Pack
Blue Caps With PTFE/Red Rubber Seals	60180-569	100 Pack
100µL Removable Needle Gas Tight Syringe, 50mm Length, 23 Gauge, Side Hole	36520050	1 Each

PBDE (ROSH) Application Kit

Description	Cat. No.	Quantity
PBDE (ROSH) Application Kit	60181-738	1 Each
Containing the following:		
TraceGOLD TG-5HT GC Column 15m x 0.25mm x 0.10µm	26095-0350	1 Each
S/SL Injector – BTO Septa 17mm Diameter	31303211	50 Pack
S/SL Injector – Split/Splitless Liner, 5mm ID x 8mm OD x 105mm Length	45350033	5 Pack
S/SL Injector – Silver Seals	29033629	10 Pack
S/SL Injector – Graphite Liner Seals	29033406	10 Pack
S/SL Injector – Graphite Ferrules for 0.25mm ID Column	29053488	10 Pack
MS Interface – Graphite/Vespel Ferrules for 0.25mm ID Column	29033496	10 Pack
2mL Screw Top Vials, Amber Glass	60180-567	100 Pack
Blue Caps With PTFE/Red Rubber Seals	60180-569	100 Pack
10µL Fixed Needle Syringe, 50mm Length, 25 Gauge, Cone Needle	36500525	1 Each

Applications:

- Phenols
- Residual solvents
- Solvents
- Semivolatiles
- Pesticides
- PCBs
- Solvent impurities

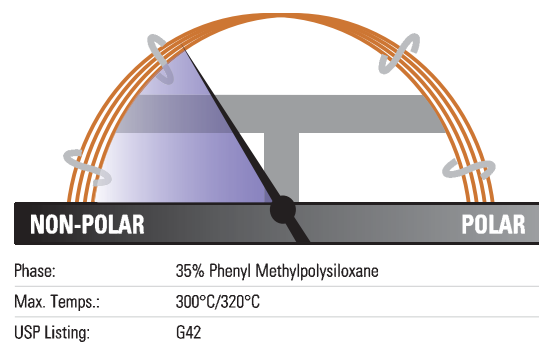
Similar to:

- Rxi-5HT
- BP-5HT
- VF-5HT
- ZB-5HT

TraceGOLD TG-35MS GC Columns

Higher phenyl content for useful elution order and retention time changes

- Mid-polarity phase, 35% phenyl methylpolysiloxane
- Equivalent to USP G42 phase



TraceGOLD TG-35MS GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.25	15	0.25	26094-1300	1 Each
		0.5	26094-2110	1 Each
	30	0.25	26094-1420	1 Each
		0.5	26094-2230	1 Each
0.32	15	0.25	26094-1310	1 Each
		0.5	26094-2120	1 Each
	30	0.25	26094-1430	1 Each
		0.5	26094-2240	1 Each
0.53	15	0.5	26094-2130	1 Each
		1.0	26094-2860	1 Each
		1.5	26094-3340	1 Each
		3.0	26094-3840	1 Each
	30	0.5	26094-2250	1 Each
		1.0	26094-2980	1 Each
		1.5	26094-3360	1 Each
		3.0	26094-3960	1 Each

Applications:

- Organochlorine pesticides and herbicides
- Pharmaceuticals
- PCB congeners
- Aroclor mixes
- Sterols
- Rosin acids
- Phthalate esters

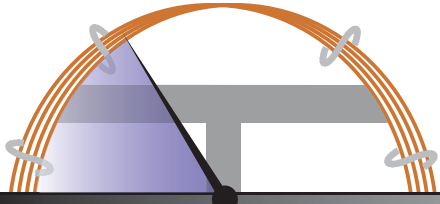
Similar to:

- Rtx-35
- BP-35
- HP-35
- SPB-35
- SPB-608

TraceGOLD TG-35MS AMINE GC Columns

Chemically altered tubing surface reduces tailing and eliminates the need for column priming

- Mid-polarity phase, base optimized 5% phenyl methylpolysiloxane
- Developed for analysis of active basic compounds without derivatization
- Also allows analysis of neutral compounds and adsorptive compounds with oxygen groups susceptible to hydrogen bonding
- Low bleed at maximum operating temperature

	
Phase:	Modified 35% Phenyl Methylpolysiloxane for Basic Compounds
Max. Temps.:	220°C
USP Listing:	N/A

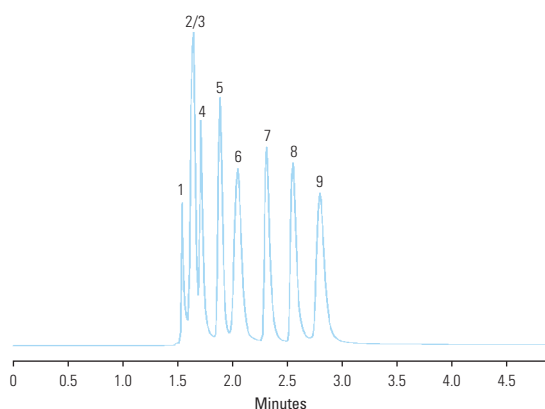
TraceGOLD TG-35MS AMINE GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.25	15	0.5	26092-2110	1 Each
		1.0	26092-2840	1 Each
	30	0.5	26092-2230	1 Each
		1.0	26092-2960	1 Each
0.32	15	1.0	26092-2850	1 Each
	30	1.0	26092-2970	1 Each
		1.5	26092-3350	1 Each
0.53	15	1.0	26092-2860	1 Each
		3.0	26092-3840	1 Each
	30	1.0	26092-2980	1 Each
		3.0	26092-3960	1 Each

Applications:

- Amines including alkylamines, diamines, triamines and ethanolamines
- Nitrogen-containing heterocyclics

Primary amines



Column: TG-35MS AMINE 30m x 0.53mm x 1.0μm

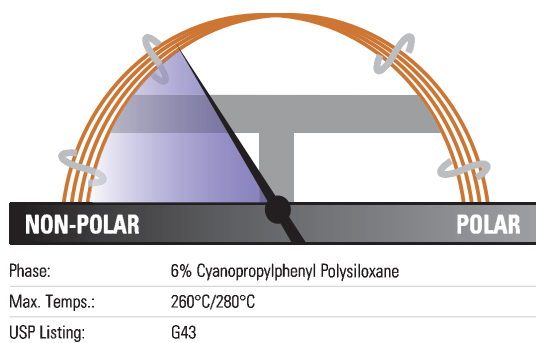
Part Number:	26092-2980
Temperature:	35°C (5 minute hold) Isothermal
Detector Type:	FID
Carrier Gas:	He
Flow Rate:	35cm/sec
Injection Volume:	1.0μL
Injection Mode:	Split (10:1), 250°C

- | | |
|-------------------|--------------------|
| 1. methylamine | 6. tert-butylamine |
| 2. dimethylamine | 7. n-propylamine |
| 3. trimethylamine | 8. diethylamine |
| 4. ethylamine | 9. sec-butylamine |
| 5. isopropylamine | |

TraceGOLD TG-1301MS GC Columns

Low bleed, excellent reproducibility and column-to-column consistency even with sensitive detectors like ECD and MS

- Low to mid-polarity phase, 6% cyanopropylphenyl methylpolysiloxane
- Long lifetime
- Excellent inertness
- Equivalent to USP G43 phase



TraceGOLD TG-1301MS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.25	26091-1300	1 Each
		0.5	26091-2110	1 Each
		1.0	26091-2840	1 Each
	30	0.25	26091-1420	1 Each
		0.5	26091-2230	1 Each
		1.0	26091-2960	1 Each
	60	0.25	26091-1540	1 Each
		0.5	26091-2350	1 Each
		1.0	26091-3080	1 Each
0.32	15	0.25	26091-1310	1 Each
		0.5	26091-2120	1 Each
		1.0	26091-2850	1 Each
	30	0.25	26091-1430	1 Each
		0.5	26091-2240	1 Each
		1.0	26091-2970	1 Each
	60	1.5	26091-3350	1 Each
		1.8	26091-3390	1 Each
		0.25	26091-1550	1 Each
		0.5	26091-2360	1 Each
		1.0	26091-3090	1 Each
		1.8	26091-3410	1 Each
0.53	15	0.25	26091-1320	1 Each
		0.5	26091-2130	1 Each
		1.0	26091-2860	1 Each
	30	0.25	26091-1440	1 Each
		0.5	26091-2250	1 Each
		1.0	26091-2980	1 Each
	60	1.5	26091-3360	1 Each
		3.0	26091-3960	1 Each
		0.25	26091-1560	1 Each
		0.5	26091-2370	1 Each
		1.0	26091-3100	1 Each
		1.5	26091-3370	1 Each
		3.0	26091-4080	1 Each

Applications:

- Alcohols
- Volatile organics
- Oxygenates
- Residual solvents

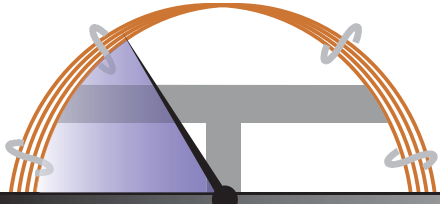
Similar to:

- Rtx-1301
- DB-1301
- BP-624
- HP-1301
- HP-624
- SPB-1301
- SPB-624
- VP-1301
- BF-624ms
- CP-1301
- CP-Select 624 CB

TraceGOLD TG-624 GC Columns

Offers 90+% resolution of the first six gases in EPA Method 8260 and EPA Method 524.2 for volatile organics analysis

- Low to mid-polarity phase, 6% cyanopropylphenyl methylpolysiloxane
- Ideal for EPA methods 624 and 608
- Allows resolution of 2-nitropropane from 1,1-dichloropropanone under EPA Method 524.2 revision IV

	
NON-POLAR	POLAR
Phase:	6% Cyanopropylphenyl Polysiloxane
Max. Temps.:	240°C
USP Listing:	G43

TraceGOLD TG-624 GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.18	20	1.0	26085-4950	1 Each
	40	1.0	26085-4960	1 Each
0.25	30	1.4	26085-3320	1 Each
	60	1.4	26085-3330	1 Each
0.32	30	1.8	26085-3390	1 Each
	60	1.8	26085-3410	1 Each
0.53	30	3.0	26085-3960	1 Each
	60	3.0	26085-4080	1 Each
	75	3.0	26085-4900	1 Each
	105	3.0	26085-4090	1 Each

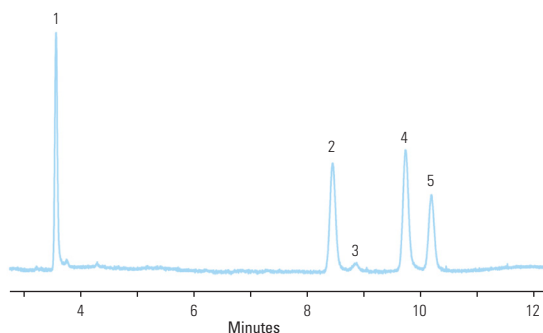
Applications:

- Residual Solvents
- Volatile Organic Compounds
- Alcohols
- Oxygenates

Similar to:

- DB-1301
- DB-624
- HP-1301
- HP-624
- SPB-1301
- SPB-624
- VF-1301
- VF-624ms
- CP-1301
- CP-Select 624 CB
- Rtx-624
- BP-624
- ZB-624
- Optima-1301
- Optima-624
- AT-624
- 007-1301

Residual solvents class 1



Column: TG-624 30m x 0.32mm x 1.80μm

Part Number:	26085-3390
Temperature:	40°C (20 minute hold) to 240°C at 10°C/min (20 minute hold)
Detector Type:	FID
Carrier Gas:	He
Flow Rate:	2.15mL/min
Injection Volume:	1.0μL
Injection Mode:	Headspace, Split (1:5), 140°C

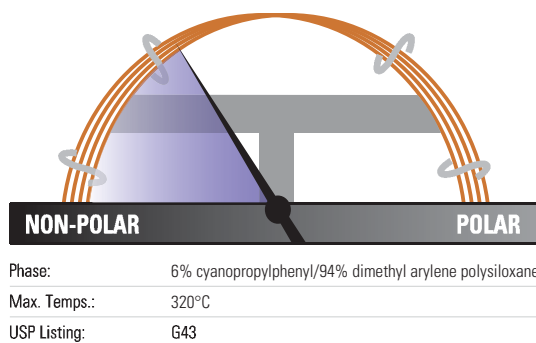
1. 1,1-dichloroethane
2. 1,1,1-trichloroethane
3. carbon tetrachloride
4. benzene
5. 1,2-dichloroethane



TraceGOLD TG-624SiIMS GC Columns

High thermal stability column ideal for volatile organics analysis

- Low to -mid polarity phase, 6% cyanopropylphenyl methylpolysiloxane
- High thermal stability – maximum temperatures up to 320°C
- Highly inert – excellent peak shape for a wide range of compounds



TraceGOLD TG-624SiIMS GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.18	20	1.0	26059-4950	1 Each
0.25	30	1.4	26059-3320	1 Each
	60	1.4	26059-3330	1 Each
0.32	30	1.8	26059-3390	1 Each
	60	1.8	26059-3410	1 Each
0.53	30	3.0	26059-3960	1 Each
	60	3.0	26059-4080	1 Each
	75	3.0	26059-4900	1 Each
	105	3.0	26059-4090	1 Each

Applications:

- Residual Solvents
- Volatile Organic Compounds
- Alcohols
- Oxygenates

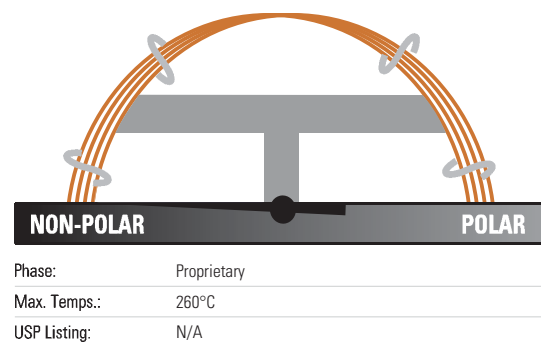
Similar to:

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

TraceGOLD TG-VRX GC Columns

Application specific column for volatile organic pollutants

- Highly stable polymer phase
- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Excellent resolution for analysis of volatile compounds
- Fast analysis times for volatile compounds



TraceGOLD TG-VRX GC Columns

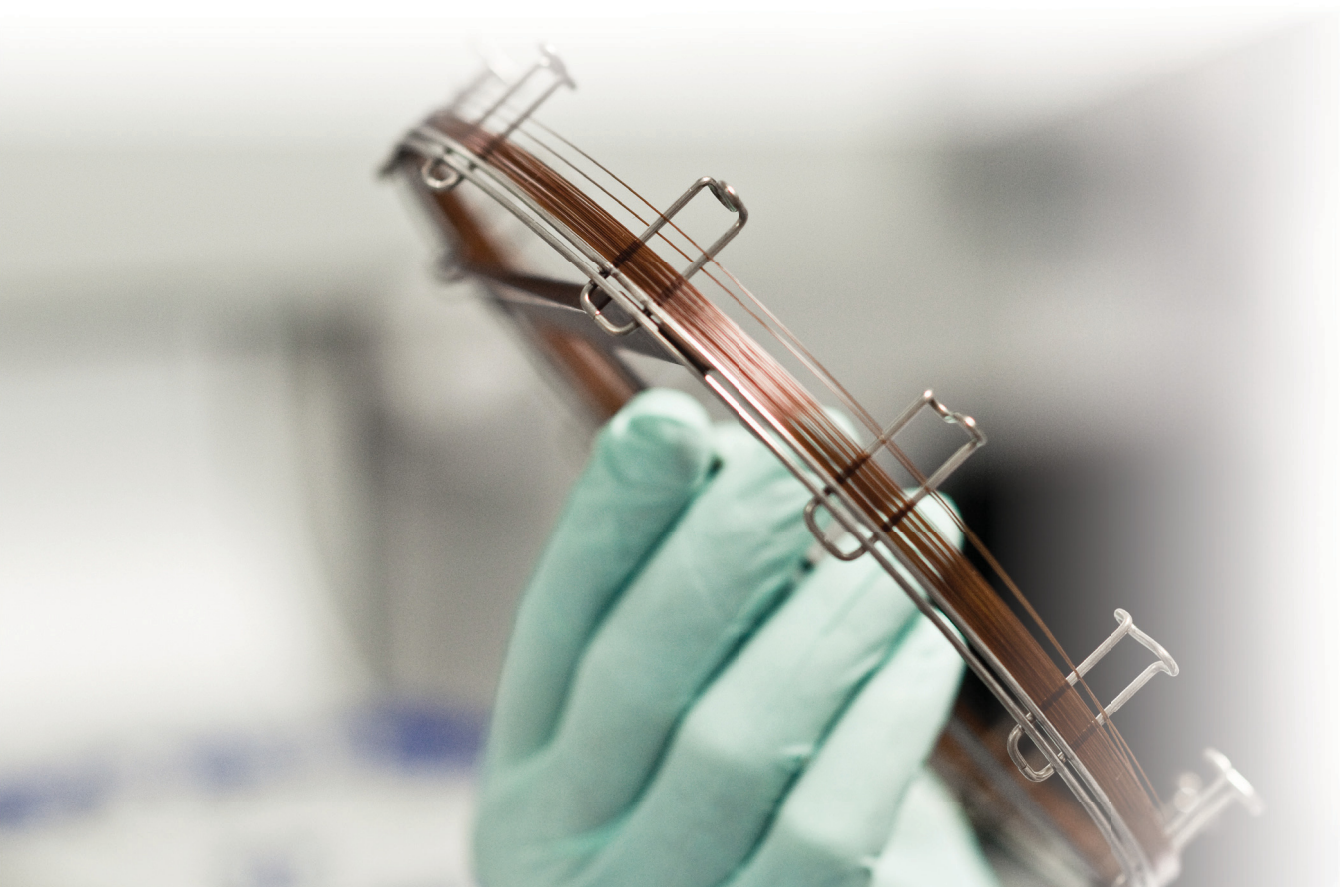
ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.18	20	1.0	26081-4950	1 Each
	40	1.0	26081-4960	1 Each
0.25	30	1.4	26081-3320	1 Each
	60	1.4	26081-3330	1 Each
0.32	30	1.8	26081-3390	1 Each
	60	1.8	26081-3410	1 Each
0.53	30	3.0	26081-3960	1 Each
	60	3.0	26081-4080	1 Each
	75	3.0	26081-4900	1 Each
	105	3.0	26081-4090	1 Each

Applications:

- Volatile organic pollutants
- US EPA Method 8021 compounds

Similar to:

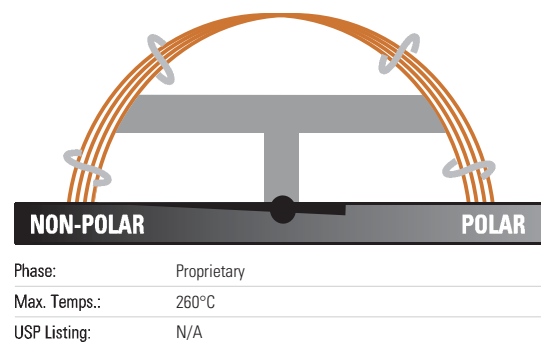
- Rtx-VRX
- DB-VRX



TraceGOLD TG-VMS GC Columns

Application specific column for volatile organic pollutants

- Highly stable polymer phase
- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Excellent resolution for analysis of volatile compounds
- Fast analysis times for volatile compounds



TraceGOLD TG-VMS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.18	20	1.0	26080-4950	1 Each
	40	1.0	26080-4960	1 Each
0.25	30	1.4	26080-3320	1 Each
	60	1.4	26080-3330	1 Each
0.32	30	1.8	26080-3390	1 Each
	60	1.8	26080-3410	1 Each
0.53	30	3.0	26080-3960	1 Each
	60	3.0	26080-4080	1 Each
	75	3.0	26080-4900	1 Each

Applications:

- Volatile organic pollutants
- US EPA Method 8260B compounds

Similar to:

- Rtx-VMS

Volatile Organic Compound (VOC) Application Kit

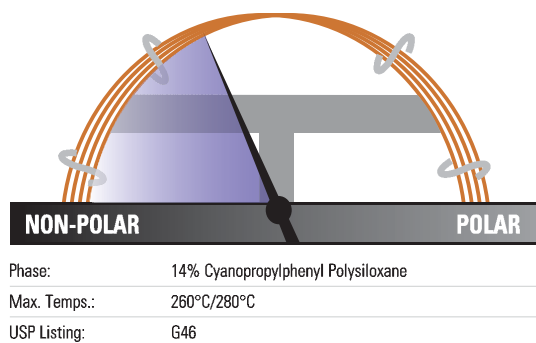
Description	Cat. No.	Quantity
Volatile Organic Compound (VOC) Application Kit	60181-734	1 Each
Containing the following:		
TraceGOLD TG-VMS GC Column 20m x 0.18mm x 1.00µm	26080-4950	1 Each
S/SL Injector – BTO Septa 9mm Diameter	31303240	50 Pack
S/SL Injector – Silver Seals	29033629	10 Pack
S/SL Injector – Graphite Liner Seals	29033406	10 Pack
S/SL Injector – Graphite Ferrules for 0.25mm ID Column	29053488	10 Pack
MS Interface – Graphite/Vespel Ferrules for 0.25mm ID Column	29033496	10 Pack
2mL Screw Top Vials, Amber Glass	60180-567	100 Pack
Blue Caps with PTFE/Red Rubber Seals	60180-569	100 Pack
40mL VOA Sample Vials with Caps and Seals	60180-573	72 Pack

Search thousands of applications
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www.thermoscientific.com/crc

TraceGOLD TG-1701MS GC Columns

Feature a mix of cyano and phenyl groups for increased polarity and a different elution order relative to less polar columns

- Mid-polarity phase, 14% cyanopropylphenyl methylpolysiloxane
- Fully characterized for long-term reproducibility, column-to-column consistency and low bleed
- Optimal for confirmation analysis
- Equivalent to USP G46 phase



TraceGOLD TG-1701MS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.1	10	0.1	26090-0200	1 Each
0.25	15	0.25	26090-1300	1 Each
		0.5	26090-2110	1 Each
		1.0	26090-2840	1 Each
	30	0.25	26090-1420	1 Each
		0.5	26090-2230	1 Each
		1.0	26090-2960	1 Each
	60	0.25	26090-1540	1 Each
		0.5	26090-2350	1 Each
		1.0	26090-3080	1 Each
0.32	15	0.25	26090-1310	1 Each
		0.5	26090-2120	1 Each
		1.0	26090-2850	1 Each
	30	0.25	26090-1430	1 Each
		0.5	26090-2240	1 Each
		1.0	26090-2970	1 Each
	60	0.25	26090-1550	1 Each
		0.5	26090-2360	1 Each
		1.0	26090-3090	1 Each
	15	0.25	26090-1320	1 Each
		0.5	26090-2130	1 Each
		1.0	26090-2860	1 Each
0.53	15	3.0	26090-3840	1 Each
	30	0.25	26090-1440	1 Each
		0.5	26090-2250	1 Each
		1.0	26090-2980	1 Each
	30	3.0	26090-3960	1 Each
	60	0.25	26090-1560	1 Each
		0.5	26090-2370	1 Each
		1.0	26090-3100	1 Each
	60	3.0	26090-4080	1 Each

Applications:

- Alcohols
- Pesticides
- Oxygenates
- PCB congeners
- Aroclor mixes

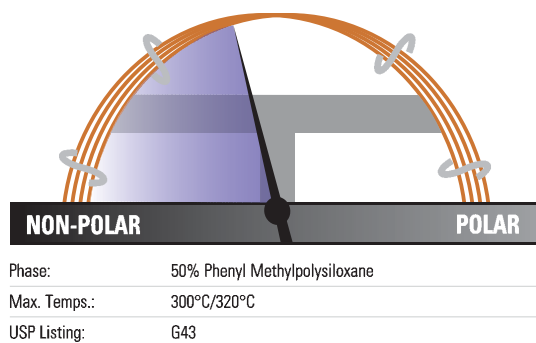
Similar to:

- Rtx-1701
- DB-1701
- HP-1701
- SPB-1701
- VF-1701
- CP-Sil 19 CB

TraceGOLD TG-17MS GC Columns

Particularly suited to GC-MS applications that require more polarity than a 5% Phenyl phase

- Mid-polarity phase of 50% phenyl methylpolysiloxane
- Ideal for confirmational analysis
- Excellent inertness for active compounds such as pesticides
- Very low bleed ideal for analysis by GC-MS



TraceGOLD TG-17MS GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.1	10	0.1	26089-0200	1 Each
0.25	15	0.25	26089-1300	1 Each
		0.5	26089-2110	1 Each
		1.0	26089-2840	1 Each
	30	0.25	26089-1420	1 Each
		0.5	26089-2230	1 Each
		1.0	26089-2960	1 Each
0.32	15	0.25	26089-1540	1 Each
		0.5	26089-1310	1 Each
		1.0	26089-2120	1 Each
	30	0.25	26089-2850	1 Each
		0.5	26089-1430	1 Each
		1.0	26089-2240	1 Each
0.53	15	1.0	26089-2970	1 Each
		0.25	26089-1320	1 Each
		0.5	26089-2130	1 Each
	30	1.0	26089-2860	1 Each
		1.5	26089-3340	1 Each
		0.25	26089-1440	1 Each
		0.5	26089-2250	1 Each
		1.0	26089-2980	1 Each
		1.5	26089-3360	1 Each

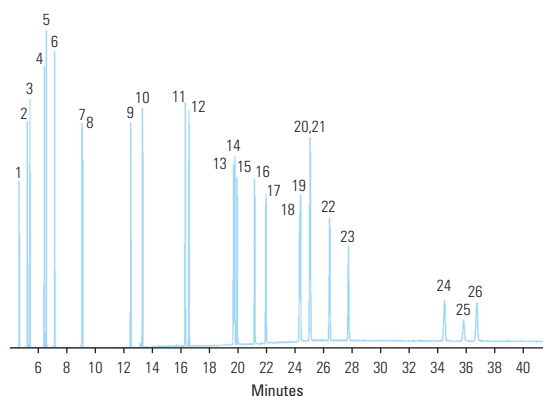
Applications:

- Pesticides and herbicides
- Rosin acids
- Phthalate esters
- Triglycerides
- Sterols

Similar to:

- Rxi-17
- DB-17
- DB-608
- VF-17ms
- CP-Sil 24 CB

Polycyclic aromatic hydrocarbons



Column: TG-17MS 30m x 0.25mm x 0.25µm

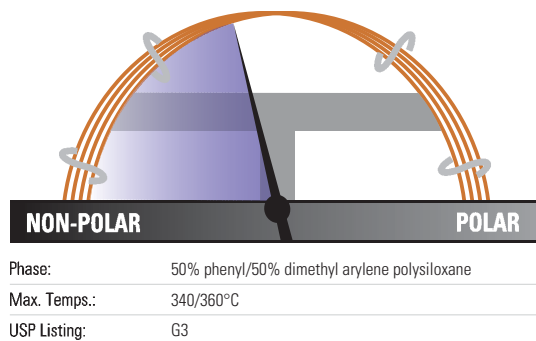
Part Number:	26089-1420
Temperature:	90°C (1.0 minute hold) to 215°C (0.5 minute hold) at 25°C/minute to 235°C at 4°C/minute to 280°C/minute at 15°C/minute to 320°C (20 minute hold) at 4°C/minute
Detector Type:	MS
Carrier Gas:	He
Flow Rate:	1.2mL/min
Injection Volume:	1.0µL
Injection Mode:	Splitless, 300°C

1. naphthalene	14. benzo(k)fluoranthene
2. 1-methylnaphthalene	15. benzo(j)fluoranthene
3. 2-methylnaphthalene	16. benzo(a)pyrene
4. acenaphthylene	17. 3-methylcholanthrene
5. acenaphthene	18. dibenzo(a,h)acridine
6. fluorene	19. dibenzo(a,j)acridine
7. phenanthrene	20. indeno(1,2,3-cd)pyrene
8. anthracene	21. dibenzo(a,h)anthracene
9. fluoranthene	22. benzo(ghi)perylene
10. pyrene	23. 7H-dibenzo(c,g)carbazole
11. benzo(a)anthracene	24. dibenzo(a,e)pyrene
12. chrysene	25. dibenzo(a,i)pyrene
13. benzo(b)fluoranthene	26. dibenzo(a,h)pyrene

TraceGOLD TG-17SiIMS GC Columns

Excellent separation of active environmental compounds

- Mid-polarity phase of 50% phenyl methylpolysiloxane
- High thermal stability – maximum temperatures up to 340/360°C
- Excellent inertness for active environmental compounds such as PAH's



TraceGOLD TG-17SiIMS GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.18	20	0.18	26072-5780	1 Each
		0.36	26072-1380	1 Each
0.25	15	0.25	26072-1300	1 Each
	30	0.25	26072-1420	1 Each
0.32	15	0.25	26072-1310	1 Each
	30	0.25	26072-1430	1 Each

Applications:

- PAHs
- Pesticides and herbicides
- Phthalate esters
- Triglycerides

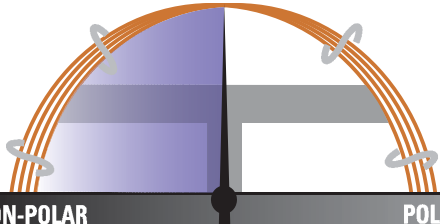
Similar to:

- DB-17ms
- VF-17ms
- CP-Sil 24 CB
- ZB-50
- BPX-50

TraceGOLD TG-225MS GC Columns

Offers better thermal stability than comparable columns

- Polar phase, 50% cyanopropylmethyl phenylmethylpolysiloxane
- Innovative deactivation process for siloxane reduces tailing and improves efficiency over comparable columns
- Equivalent to USP G7, G19 phases

	
NON-POLAR	POLAR
Phase:	50% Cyanopropylphenyl Polysiloxane
Max. Temps.:	220°C/240°C
USP Listing:	G7, G19

TraceGOLD TG-225MS GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.25	15	0.25	26083-1300	1 Each
		0.5	26083-2110	1 Each
	30	0.25	26083-1420	1 Each
		0.5	26083-2230	1 Each
	60	0.25	26083-1540	1 Each
		0.5	26083-2350	1 Each
0.32	15	0.25	26083-1310	1 Each
		0.5	26083-2120	1 Each
	30	0.25	26083-1430	1 Each
		0.5	26083-2240	1 Each
	60	0.5	26083-2360	1 Each
		0.5	26083-2360	1 Each
0.53	15	0.25	26083-1320	1 Each
		0.5	26083-2130	1 Each
	30	0.25	26083-1440	1 Each
		0.5	26083-2250	1 Each
	60	0.5	26083-2370	1 Each
		0.5	26083-2370	1 Each

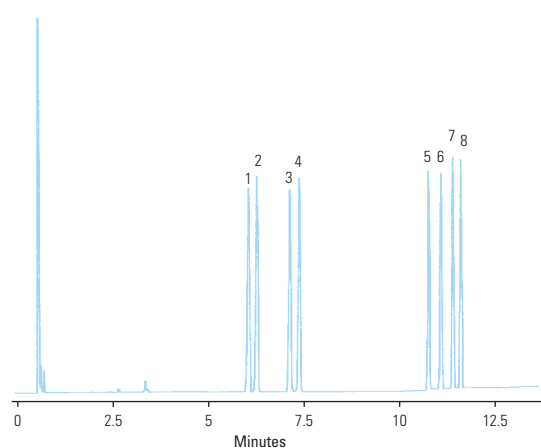
Applications:

- FAMES
- Carbohydrates
- Sterols
- Flavor compounds

Similar to:

- Rtx-225
- DB-225
- HP-225
- SPB-225

Sugars



Column: TG-225MS 15m x 0.25mm x 0.25μm

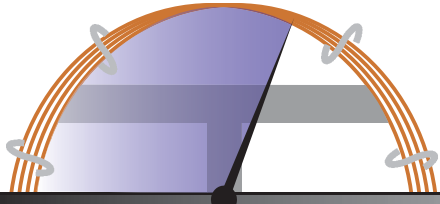
Part Number:	26083-1300
Temperature:	190°C (5 minute hold) to 250°C at 8°C/min (5 minute hold)
Detector Type:	FID
Carrier Gas:	Hydrogen
Flow Rate:	45cm/sec
Injection Volume:	0.5μL
Injection Mode:	Split (35:1), 260°C

1. rhamnitol	5. mannitol
2. fucitol	6. galactitol
3. ribitol	7. glucitol
4. arabinitol	8. inositol

TraceGOLD TG-200MS GC Columns

Exceptionally inert mid-polarity columns with selectivity and elution order optimized for difficult separations

- Polar phase, trifluoropropyl methyl polysiloxane solid phase resolves compounds that phenyl and cyano phases cannot
- Outstanding thermal stability and low bleed
- Suitable for use with sensitive detectors including ECD, NPD and MS
- Confirmation column in combination with another GC column

	
Phase:	Trifluoropropylmethyl Polysiloxane
Max. Temps.:	320°C/340°C
USP Listing:	G6

TraceGOLD TG-200MS GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.25	30	0.25	26084-1420	1 Each
		0.5	26084-2230	1 Each
		1.0	26084-2960	1 Each
0.32	30	0.25	26084-1430	1 Each
		0.5	26084-2240	1 Each
		1.0	26084-2970	1 Each

Applications:

- Solvents
- Fluorocarbons
- Alcohols and ketones
- Silanes
- Glycols

Similar to:

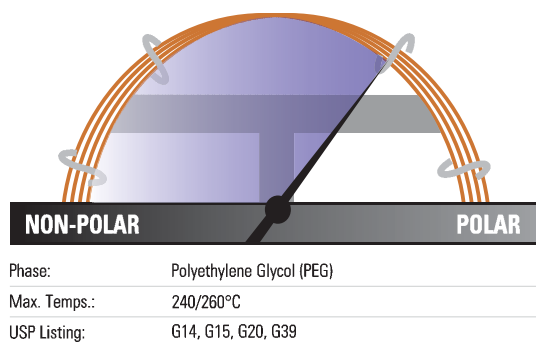
- Rtx-200MS
- DB-200
- DB-210



TraceGOLD TG-WaxMS GC Columns

Manufactured for better column-to-column reproducibility

- Polar phase, polyethylene glycol
- Polar-deactivated surface tightly binds polymer for excellent thermal stability
- Resists oxidative damage, damage from strongly acidic or basic volatiles better than silicone solid phases



TraceGOLD TG-WaxMS GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.1	10	0.1	26088-0200	1 Each
0.18	20	0.18	26088-5780	1 Each
0.25	15	0.25	26088-1300	1 Each
		0.5	26088-2110	1 Each
		0.25	26088-1420	1 Each
	30	0.5	26088-2230	1 Each
		0.25	26088-1540	1 Each
		0.5	26088-2350	1 Each
0.32	15	0.25	26088-1310	1 Each
		0.5	26088-2120	1 Each
		1.0	26088-2850	1 Each
	30	0.25	26088-1430	1 Each
		0.5	26088-2240	1 Each
		1.0	26088-2970	1 Each
	60	0.25	26088-1550	1 Each
		0.5	26088-2360	1 Each
		1.0	26088-3090	1 Each
0.53	15	0.25	26088-1320	1 Each
		0.5	26088-2130	1 Each
		1.0	26088-2860	1 Each
	30	0.25	26088-1440	1 Each
		0.5	26088-2250	1 Each
		1.0	26088-2980	1 Each
	60	1.5	26088-3360	1 Each
		0.25	26088-1560	1 Each
		0.5	26088-2370	1 Each
		1.0	26088-3100	1 Each
		1.5	26088-3370	1 Each

Applications:

- FAMES
- Flavor compounds and essential oils
- Solvents
- Xylene isomers
- EPA Method 603 for Acrolein/ Acrylonitrile

Similar to:

- DB-WAX
- DB-WAXetr
- HP-Wax
- HP-Innowax
- Supelcowax 10
- CP-Wax 52 CB
- Stabilwax
- Rtx-Wax
- BP20
- ZB-Wax
- Optima Wax
- AT-Wax

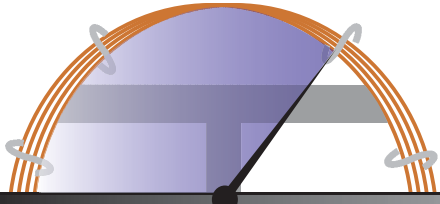
Search thousands of applications
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TraceGOLD TG-WaxMS A GC Columns

Acidic functionality in the polymer structure allows analysis of acidic compounds without derivatization

- Polar phase, acid-deactivated polyethylene glycol
- Resists oxidative damage and adsorption of acids
- Excellent peak shapes for high MW acids
- Equivalent to USP G25, G35 phases

	
Phase:	Polyethylene Glycol (PEG)
Max. Temps.:	240°C / 250°C
USP Listing:	G25, G35

TraceGOLD TG-WaxMS A GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.25	26087-1300	1 Each
		0.5	26087-2110	1 Each
	30	0.25	26087-1420	1 Each
		0.5	26087-2230	1 Each
	60	0.25	26087-1540	1 Each
		0.5	26087-2350	1 Each
0.32	15	0.25	26087-1310	1 Each
		0.5	26087-2120	1 Each
	30	0.25	26087-1430	1 Each
		0.5	26087-2240	1 Each
	60	1.0	26087-2970	1 Each
		0.25	26087-1550	1 Each
0.53	15	0.5	26087-2360	1 Each
		1.0	26087-1320	1 Each
		0.5	26087-2130	1 Each
	30	1.0	26087-2860	1 Each
		0.25	26087-1440	1 Each
		0.5	26087-2250	1 Each
	60	1.0	26087-2980	1 Each
		0.25	26087-1560	1 Each
		0.5	26087-2370	1 Each
		1.0	26087-3100	1 Each

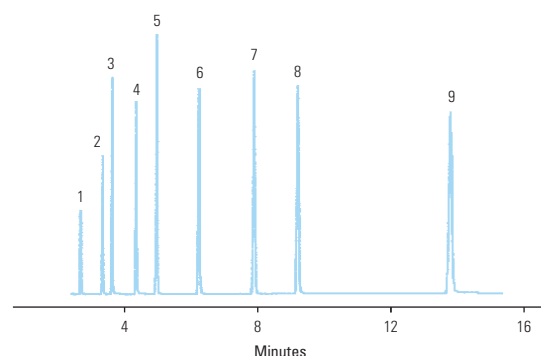
Applications:

- Organic acids
- Free fatty acids
- Alcohols

Similar to:

- DB-FFAP
- HP-FFAP
- NUKOL
- OV-351
- CP-Wax 58 CB
- FFAP
- Stabilwax-DA
- BP-21
- Optima FFAP

Free fatty acids



Column: TG-WaxMS A 30m x 0.25mm x 0.25µm

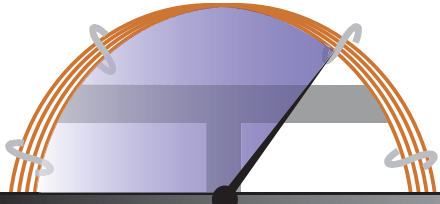
Part Number:	26087-1420
Temperature:	145°C Isothermal
Detector Type:	FID
Carrier Gas:	Hydrogen
Flow Rate:	40cm/sec
Injection Volume:	1.0µL
Injection Mode:	Split (50:1), 250°C

- | | |
|--------------------|--------------------|
| 1. acetic acid | 6. n-valeric acid |
| 2. propionic acid | 7. isocaproic acid |
| 3. isobutyric acid | 8. caproic acid |
| 4. n-butyric acid | 9. heptanoic acid |
| 5. isovaleric acid | |

TraceGOLD TG-WaxMS B GC Columns

Base deactivation allows analysis of basic analytes without derivatization or column priming

- Polar phase, base deactivated polyethylene glycol phase
- Reduced absorption and improved responsiveness for basic compounds
- Not suitable for use with water or alcohols

	
Phase:	Modified Polyethylene Glycol (PEG) for Basic Compounds
Max. Temps.:	200°C/220°C
USP Listing:	N/A

TraceGOLD TG-WaxMS B GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.25	26086-1300	1 Each
	30	0.25	26086-1420	1 Each
		0.5	26086-2230	1 Each
0.32	15	0.25	26086-1310	1 Each
		1.0	26086-2850	1 Each
	30	0.25	26086-1430	1 Each
		0.5	26086-2240	1 Each
		1.0	26086-2970	1 Each
	60	1.0	26086-3090	1 Each
0.53	15	1.0	26086-2860	1 Each
	30	0.5	26086-2250	1 Each
		1.0	26086-2980	1 Each
	60	1.0	26086-3100	1 Each

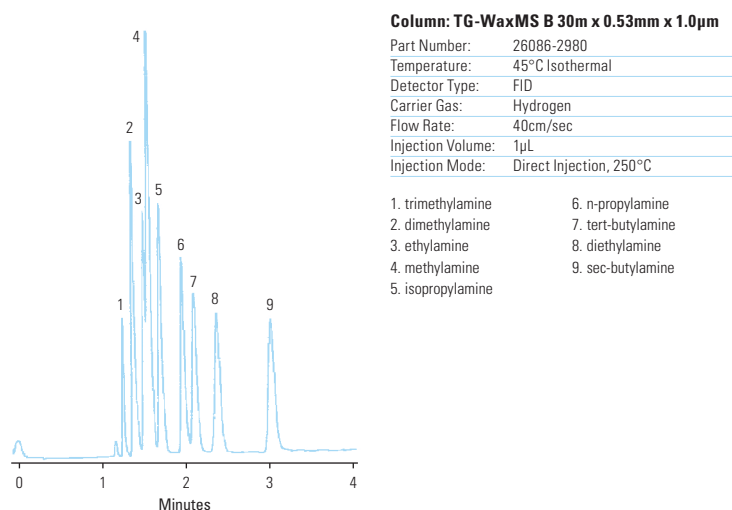
Applications:

- Amines
- Alkylamines
- Diamines
- Other basic compounds

Similar to:

- CAM
- Carbowax Amine
- CP Wax51
- Stabilwax-DB

Amines

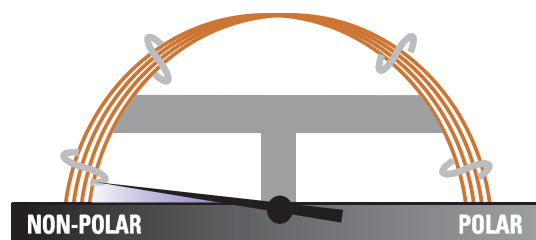


TraceGOLD GC Columns with SafeGuard

Extend your column lifetime without compromising performance

- Integrated guard on the GC column
- Prolong the lifetime of an analytical GC column
- No impact upon performance when cutting column during routine maintenance
- Available in a range of phases to meet many application needs

TraceGOLD TG-1MS GC Columns with SafeGuard

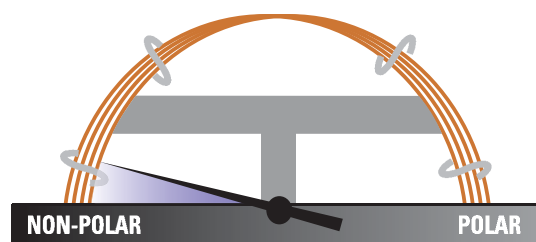


NON-POLAR	POLAR
Phase:	100% Dimethyl Polysiloxane
Max. Temps.:	330°C/350°C
USP Listing:	G2

TraceGOLD TG-1MS GC Columns with SafeGuard

ID (mm)	Length (m)	Film Thickness (µm)	SafeGuard Length (m)	Cat. No.	Quantity
0.25	30	0.25	5	26099-1425	1 Each
0.53	30	1.0	5	26099-2985	1 Each
		5.0	5	26099-4705	1 Each

TraceGOLD TG-5MS GC Columns with SafeGuard

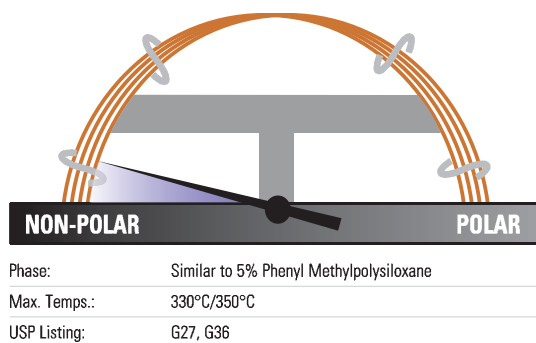


NON-POLAR	POLAR
Phase:	5% diphenyl / 95% dimethyl polysiloxane
Max. Temps.:	330°C/350°C
USP Listing:	G27, G36

TraceGOLD TG-5MS GC Columns with SafeGuard

ID (mm)	Length (m)	Film Thickness (µm)	SafeGuard Length (m)	Cat. No.	Quantity
0.18	20	0.18	5	26098-5785	1 Each
0.25	30	0.25	5	26098-1305	1 Each
		0.1	5	26098-0475	1 Each
		0.25	5	26098-1425	1 Each
		0.5	5	26098-2235	1 Each
		0.25	5	26098-1435	1 Each
0.32	30	0.25	5	26098-1435	1 Each

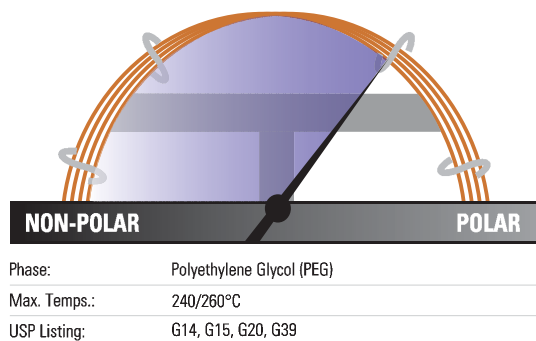
TraceGOLD TG-5SilMS GC Columns with SafeGuard



TraceGOLD TG-5SilMS GC Columns with SafeGuard

ID (mm)	Length (m)	Film Thickness (μm)	SafeGuard Length (m)	Cat. No.	Quantity
0.25	15	0.25	10	26096-1301	1 Each
	30	0.25	5	26096-1425	1 Each
		0.25	10	26096-1421	1 Each
		0.5	5	26096-2235	1 Each
0.32	30	0.5	5	26096-2245	1 Each

TraceGOLD TG-WaxMS GC Columns with SafeGuard



TraceGOLD TG-WaxMS GC Columns with SafeGuard

ID (mm)	Length (m)	Film Thickness (μm)	SafeGuard Length (m)	Cat. No.	Quantity
0.25	15	0.25	5	26088-1305	1 Each
	30	0.25	10	26088-1421	1 Each
0.32	30	0.25	5	26088-1435	1 Each

Trying to find the right column for your separation?
Use our column selection guides



PAGE 3-005

TraceGOLD TG-Dioxin GC Columns

Excellent separation of toxic dioxin and furan congeners

- Isomer specificity for 2,3,7,8-TCDD and 2,3,7,8-TCDF achieved with a single GC column
- High thermal stability – maximum temperatures up to 340°C
- Unique selectivity for toxic dioxin and furan congeners allows use as a confirmation GC column



NON-POLAR		POLAR			
Phase:	Proprietary				
Max. Temps.:	340°C				
USP Listing:	N/A				

TraceGOLD TG-Dioxin GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.18	40	0.18	26066-4800	1 Each
0.25	60	0.25	26066-1540	1 Each

Persistent Organic Pollutants (POPs) Confirmation Kit

Description	Cat. No.	Quantity
Persistent Organic Pollutants (POPs) Confirmation Kit	TS-MKITG503	1 Each
Containing the following:		
TraceGOLD TG-Dioxin GC Column 60m x 0.25mm x 0.25µm	26066-1540	1 Each
S/SL Injector – BTO Septa 11mm diameter	31303233	50 Pack
S/SL Injector – Split Straight Liner 4 x 6.3 x 78.5mm, Quartz Wool	453A2265	5 Pack
S/SL Injector – Splitless Liner with Single Taper 4 x 6.3 x 78.5mm, Quartz Wool	453A1925	5 Pack
Gold Inlet Base Seals, Single Column Installation	290GA081	10 Pack
Graphite Liner Sealing Rings	290GA243	10 Pack
Graphite Ferrules for 0.1-0.32mm Column	290GA139	10 Pack
Graphite/Vespel Ferrules for 0.1-0.25mm Column	290VA191	10 Pack
1.1mL Screw Top Tapered Vial, Clear Gold Grade Glass	1.1-STVG	500 Pack
8mm Screw Caps with Pre-Fitted Silicone/PTFE Septa	8-SC-ST15	500 Pack
10µL fixed Needle Syringe for TriPlus RSH, 57mm Length, 26s Gauge	365D0291	1 Each

Applications:

- Dioxins
- Furans

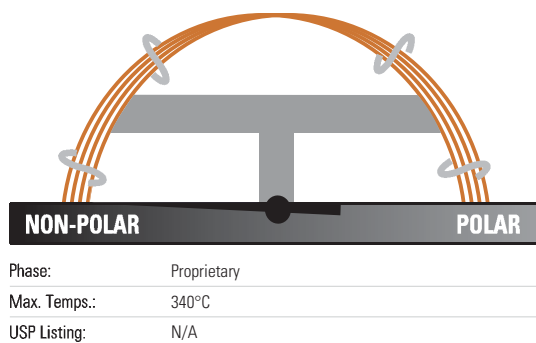
Similar to:

- Rtx-Dioxin2
- DB-Dioxin

TraceGOLD TG-OCP I / TG-OCP II GC Columns

Application-specific columns for organochlorine pesticides and herbicides

- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Fast analysis time giving full separation of chlorinated pesticides
- Ideal for US EPA methods 8081, 608 and CLP



TraceGOLD TG-OCP I GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.10	10	0.1	26078-0200	1 Each
	20	0.18	26078-1510	1 Each
0.18	10	0.18	26078-5780	1 Each
	20	0.18	26078-5780	1 Each
	30	0.18	26078-5780	1 Each
0.25	15	0.25	26078-1300	1 Each
	30	0.25	26078-1420	1 Each
	60	0.25	26078-1540	1 Each
0.32	15	0.5	26078-2120	1 Each
	30	0.32	26078-5760	1 Each
	30	0.5	26078-2240	1 Each
0.53	15	0.5	26078-2130	1 Each
	30	0.5	26078-2250	1 Each

TraceGOLD TG-OCP II GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.10	10	0.1	26077-0200	1 Each
	20	0.1	26077-1450	1 Each
0.18	10	0.14	26077-5700	1 Each
	20	0.14	26077-5690	1 Each
0.25	15	0.2	26077-5730	1 Each
	30	0.2	26077-5720	1 Each
	60	0.2	26077-5710	1 Each
0.32	15	0.25	26077-1310	1 Each
	30	0.25	26077-1430	1 Each
	30	0.5	26077-2240	1 Each
0.53	15	0.42	26077-5750	1 Each
	30	0.42	26077-5740	1 Each

Applications:

- Organochlorine pesticides
- Herbicides

Similar to:

- Rtx-CLPesticides/
Rtx-CLPesticides2

TraceGOLD TG-OPP I / TG-OPP II GC Columns

Application-specific columns for organophosphorus pesticides

- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Fast analysis time giving full separation of organophosphorus pesticides
- Ideal for US EPA methods 8141A



Phase:	Proprietary
Max. Temps.:	330°C
USP Listing:	N/A

TraceGOLD TG-OPP I GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	30	0.25	26076-1420	1 Each
0.32	30	0.5	26076-2240	1 Each
0.53	30	0.83	26076-0690	1 Each

TraceGOLD TG-OPP II GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.18	20	0.2	26076-1580	1 Each
0.25	30	0.25	26075-1420	1 Each
0.32	30	0.32	26075-5760	1 Each
0.53	30	0.5	26075-2250	1 Each

Applications:

- Organophosphorus pesticides

Similar to:

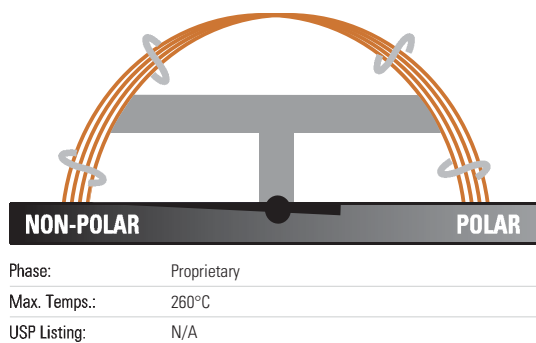
- Rtx-OPPesticides/
Rtx-OPPesticides2



TraceGOLD TG-ALC Plus I / TG-ALC Plus II GC Columns

Application-specific columns for blood alcohol analysis

- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Fast analysis time giving full separation of blood alcohols



TraceGOLD TG-ALC Plus I GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.32	30	1.8	26063-3390	1 Each
0.53	30	3.0	26063-3960	1 Each

TraceGOLD TG-ALC Plus II GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.32	30	0.5	26063-2240	1 Each
0.53	30	1.0	26063-2980	1 Each

Applications:

- Blood alcohol analysis
- Abused inhalant anesthetics
- γ-hydroxybutyrate (GHB)
- γ-butyrolactone (GBL)
- Glycols
- Common industrial solvents

Similar to:

- Rtx BAC Plus 1 / Rtx BAC Plus 2

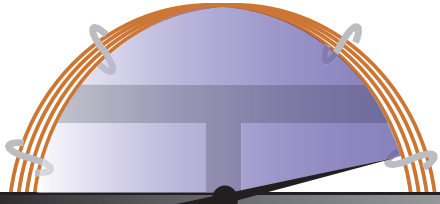
Search thousands of applications
in our chromatography resource center
www.thermoscientific.com/crc



TraceGOLD TG-POLAR GC Columns

Specifically designed polymer and surface treatment overcome traditional problems with high-polarity columns

- Highly polar phase, 95% Cyanopropylphenyl Polysiloxane
- Strong dipole moment and high selectivity for cis/trans compounds or compounds with conjugated double bonds
- Equivalent to USP G8 and G48



Phase:	90% Cyanopropylphenyl Polysiloxane
Max. Temps.:	260°C/275°C
USP Listing:	G8, G48

TraceGOLD TG-POLAR GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	30	0.1	26082-0470	1 Each
		0.2	26082-5010	1 Each
	60	0.1	26082-0590	1 Each
		0.2	26082-5020	1 Each
	105	0.1	26082-5000	1 Each
		0.2	26082-5030	1 Each
0.32	30	0.2	26082-5040	1 Each
	60	0.2	26082-5050	1 Each
	105	0.2	26082-5060	1 Each
0.53	30	0.1	26082-0490	1 Each
		0.2	26082-5070	1 Each
	60	0.1	26082-0610	1 Each
		0.2	26082-5080	1 Each

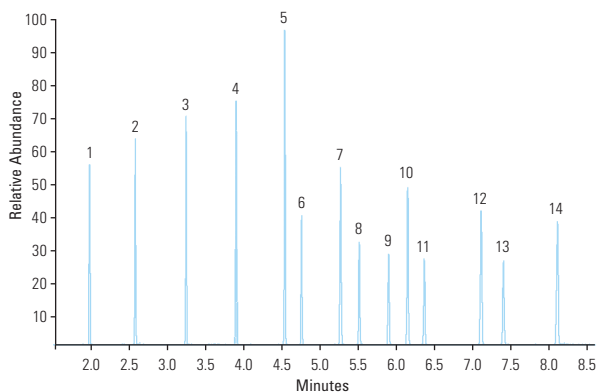
Applications:

- Cis/Trans FAMES
- Dioxins

Similar to:

- DB-23
- HP-23
- Rtx-2330
- SP-2330
- SP-2380
- SPB-2560
- HP-88
- Silar 10c
- CP-Sil 88 FAME
- CP-Sil 88
- BPX 70
- BPX 90

FAMES C8-C24



Column: TG-POLAR 30m x 0.25mm x 0.25µm

Part Number:	26082-1420
Temperature:	100°C (0.5 minute hold) to 195°C at 25°C/minute (1 minute hold) to 250°C at 10°C/minute (3 minute hold)
Detector Type:	MS
Carrier Gas:	He
Flow Rate:	1.2mL/min
Injection Volume:	0.1µL
Injection Mode:	Split (100:1), 250°C

- | | |
|------------------------|-------------------------------|
| 1. Methyl octanoate | 9. Methyl linoleate |
| 2. Methyl decanoate | 10. Methyl linolenate |
| 3. Methyl decanoate | 11. Methyl arachidate |
| 4. Methyl myristate | 12. Methyl behenate |
| 5. Methyl palmitate | 13. Methyl cis-13-docosenoate |
| 6. Methyl palmitoleate | 14. Methyl tetracosanoate |
| 7. Methyl stearate | |
| 8. Methyl oleate | |

TraceGOLD Fast GC Columns

GC chemists are continually striving to reduce analysis times to increase sample throughput. TraceGOLD Fast GC columns are shorter, smaller ID columns compared with conventional GC columns. This means that analysis times can be reduced.

Faster analysis with the same separation

Analysis times can be decreased by using the following:

- Shorter columns
- Quicker oven temperature ramp rate
- Higher carrier gas linear velocity

These changes also decrease resolution – however, this can be offset by the following:

- Narrow ID columns
- Hydrogen as a carrier gas
- Small film thickness

When decreasing column length and ID, it is important to maintain the phase ratio between your conventional column and fast GC column. Using the table below will help to ensure the correct dimensions of column are selected:

Phase Ratio

Phase Ratio is the ratio of the volume of mobile phase to the stationary phase.

It is an important value when changing the column dimensions in a method:

Phase Ratio (β) – column ID (μm) / 4 x film thickness (μm)



Column diameter, d_c (mm)	Film thickness, d_f (μm)										
	0.15	0.18	0.25	0.5	1	1.4	1.5	1.8	2.65	3	5
0.15	250	208	150	75	38	27	25	21	14	13	8
0.18	300	250	180	90	45	32	30	25	17	15	9
0.25	417	347	250	125	63	45	42	35	24	21	13
0.32	533	444	320	160	80	57	53	44	30	27	16
0.53	883	736	530	265	133	95	88	74	50	44	27

A 0.25mm x 0.25 μm GC column has the same phase ratio as a 0.15mm x 0.15 μm column, so will show the same selectivity provided the column stationary phase is kept the same. However, the efficiency on the 0.15mm ID column will be greater, allowing for a similar separation to be performed with a shorter column length.

The performance of a 30m x 0.25mm x 0.25 μm column can therefore be achieved with a 20m x 0.15mm x 0.15 μm column in up to 30% less time.

TraceGOLD Fast GC Columns

Faster analysis with the same separation

Selection of the most appropriate TraceGOLD Fast GC column will ensure that column performance and separation is maintained while decreasing analysis time.

Benefits of faster analysis:

- Increase speed of analysis by a factor of 3-10 times
- Faster method development
- Reduction in analysis costs
- Run any application with no compromise in the quality of results

Easy optimization of conventional methods

TraceGOLD Fast GC columns can be applied to any application in any industry. Conventional GC methods can easily be transferred to Fast GC columns without compromising performance, through consideration of the following parameters:

- Column length
- Column ID
- Column film thickness
- Carrier gas linear velocity

A reduction in column length will increase speed of analysis, but will lead to a decrease in resolution. This decrease can be offset by a decrease in column ID.

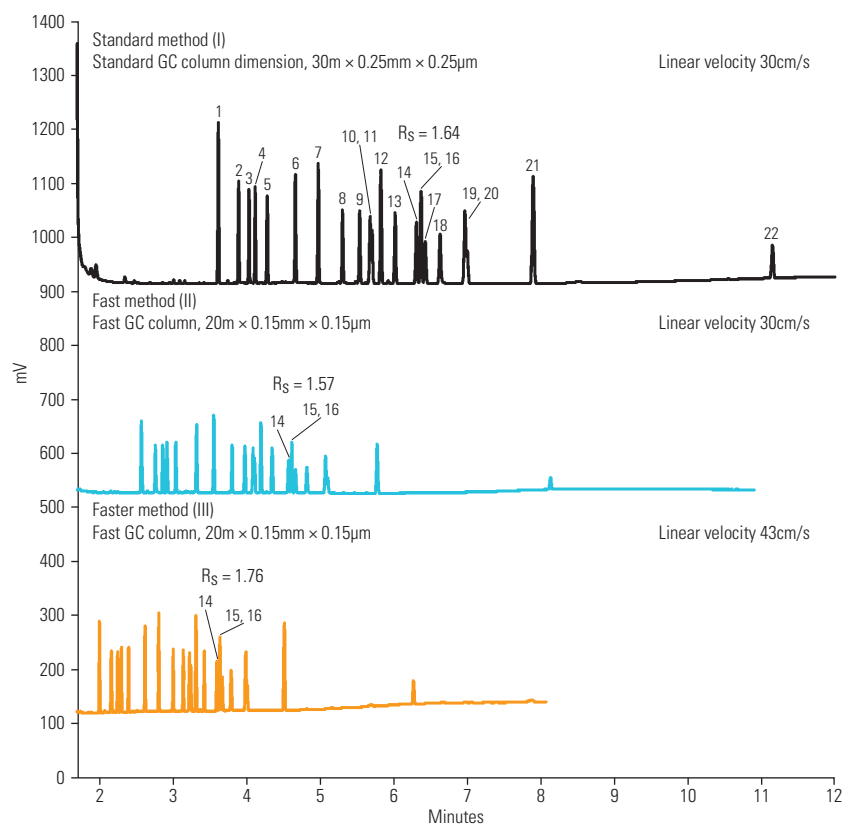
The table below shows approximate column dimensions that can be replaced with a TraceGOLD Fast GC column in order to achieve faster GC analysis. The ratio of column length to ID and phase ratio are kept the same, provided the carrier gas flow rate and fast oven ramp rate are adjusted to give similar performance.

Present Column	Fast GC Column
15m x 0.25mm x 0.25µm	10m x 0.15mm x 0.15µm
30m x 0.25mm x 0.25µm	20m x 0.15mm x 0.15µm
60m x 0.25mm x 0.25µm	40m x 0.15mm x 0.15µm
15m x 0.32mm x 0.25µm	10m x 0.15mm x 0.15µm
30m x 0.32mm x 0.25µm	15m x 0.15mm x 0.15µm
60m x 0.32mm x 0.25µm	30m x 0.15mm x 0.15µm

TraceGOLD Fast GC Columns

The applications below demonstrate how TraceGOLD Fast GC columns can speed up analysis without compromising results.

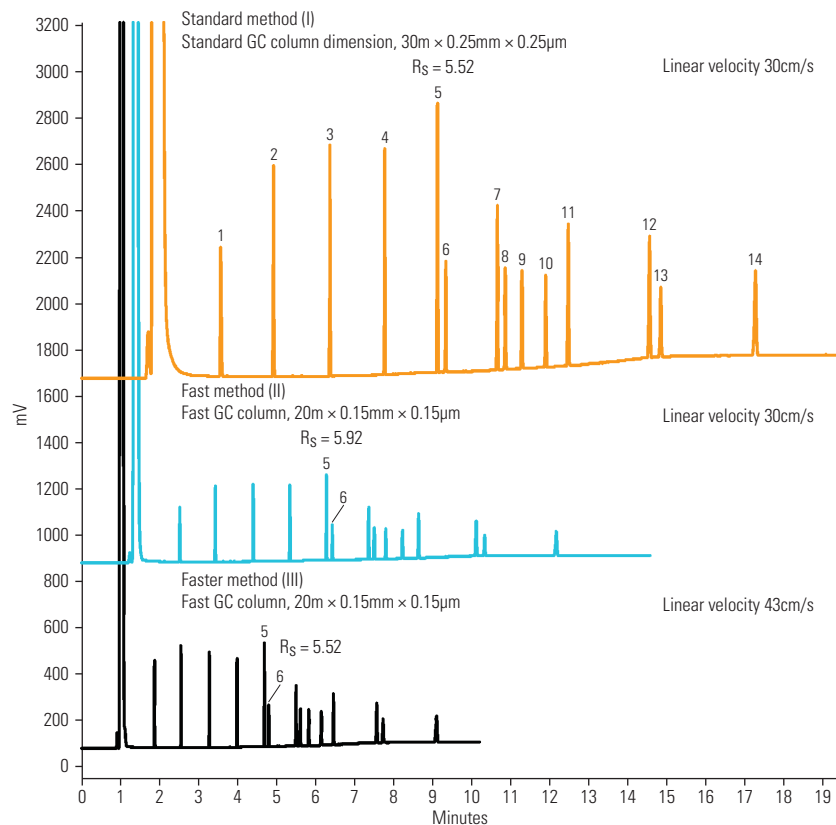
Fast Analysis of Organochlorine Pesticides using TraceGOLD TG-5SiIMS



The analysis time decreased by 30% on the Fast GC column (II) compared with the standard column (I) with a minimal reduction in resolution of approximately 4%. Method (II) was then further modified by increasing the linear velocity by approximately 40-50% to give the faster method (III). The analysis time was reduced by approximately 50% of the original method (I) with a slight increase in resolution of about 7%.

TraceGOLD Fast GC Columns

Fast Analysis of FAMES using TraceGOLD TG-WaxMS



The analysis time decreased by 30% on the Fast GC column (II) compared with the standard column (I) with an increase in resolution of approximately 7%. Method (II) was then further modified by increasing the linear velocity by approximately 40-50% to give the faster method (III). The analysis time was reduced by approximately 50% of the original method (I) with no change in resolution.

TraceGOLD Fast GC Columns Ordering Information

TraceGOLD TG-1MS Fast GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.15	10	0.15	26099-2750	1 Each
	20	0.15	26099-2760	1 Each
	40	0.15	26099-2940	1 Each
0.18	20	0.18	26099-5780	1 Each

TraceGOLD TG-5MS Fast GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.15	10	0.15	26098-2750	1 Each
	20	0.15	26098-2760	1 Each
	40	0.15	26098-2940	1 Each
0.18	20	0.18	26098-5780	1 Each

TraceGOLD TG-5SiIMS Fast GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.15	10	0.15	26096-2750	1 Each
	20	0.15	26096-2760	1 Each
	40	0.15	26096-2940	1 Each
0.18	20	0.18	26096-5780	1 Each

TraceGOLD TG-WaxMS Fast GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.15	10	0.15	26088-2750	1 Each
	20	0.15	26088-2760	1 Each
	40	0.15	26088-2940	1 Each
0.18	20	0.18	26088-5780	1 Each

TraceGOLD TG-200MS Fast GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.15	10	0.15	26084-2750	1 Each
	20	0.15	26084-2760	1 Each

TraceGOLD TG-17SiIMS Fast GC Columns

ID (mm)	Length (m)	Film Thickness (μm)	Cat. No.	Quantity
0.15	10	0.15	26072-2750	1 Each
	20	0.15	26072-2760	1 Each

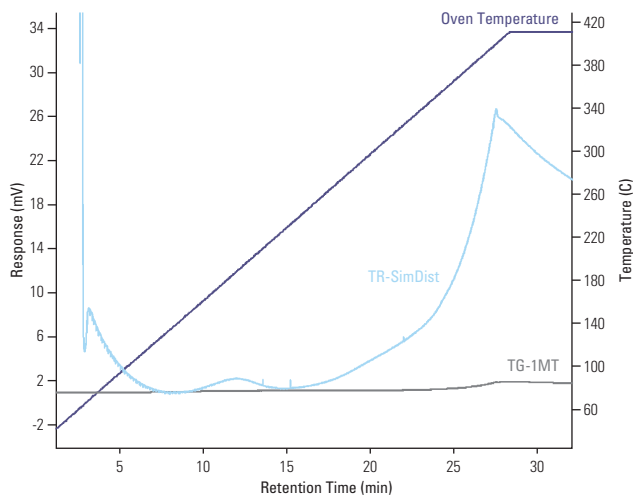
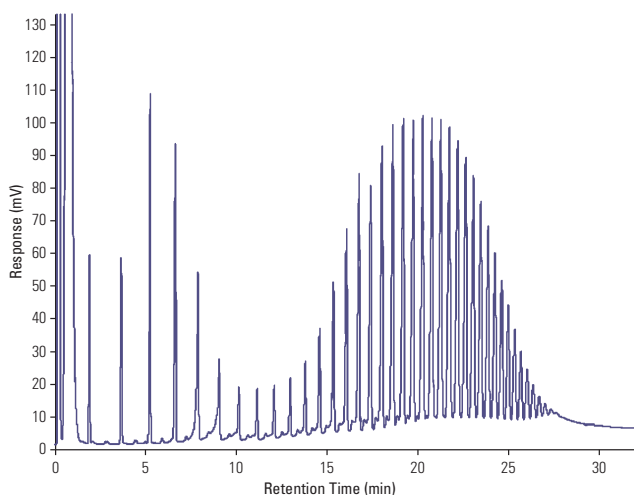
TraceGOLD Metal GC Columns – Technical Information

Push the limits of your analyses

Your analysis is critical, so your tools are critical. Thermo Scientific TraceGOLD Metal GC columns are proven to withstand the stress of elevated temperatures and highly active compounds, without any breakdown or column bleed.

Thermo Scientific TraceGOLD Metal GC columns enable the user to work at higher temperatures with no compromise in performance. The columns also withstand added stress and perform to the high standard expected from a TraceGOLD GC column when analysing highly active and aggressive compounds.

TraceGOLD Metal Column	Temperature Range (°C)
TG-1MT	-60 to 430
TG-5MT	-60 to 430
TG-WaxMT	+40 to 260



Left: A simulated distillation chromatogram showing carbon range C12-C90 using a TG-1MT metal GC column.

Right: Chromatogram showing the relative amounts of column bleed using a TG-1MT GC column against a TR-SimDist GC column when running a blank. As can be seen, the TG-1MT shows significantly lower bleed levels once the temperature rises above 300°C.



TraceGOLD TG-1MT Metal GC Columns

Metal columns for elevated temperature use

- Non-polar, 100% dimethyl polysiloxane
- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Stable to 430°C



Phase:	100% Dimethyl Polysiloxane
Max. Temps.:	430°C
USP Listing:	G2

TraceGOLD TG-1MT Metal GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.25	26M99-1300	1 Each
	30	0.25	26M99-1420	1 Each
		0.5	26M99-2230	1 Each
		1.0	26M99-2960	1 Each
	60	0.25	26M99-1540	1 Each
0.53	5	0.1	26M99-4130	1 Each
		0.88	26M99-4120	1 Each
	6	0.15	26M99-4100	1 Each
	12	0.1	26M99-0710	1 Each
	15	0.5	26M99-2130	1 Each
		1.0	26M99-2860	1 Each
	30	0.25	26M99-1440	1 Each
		0.5	26M99-2250	1 Each
		1.0	26M99-2980	1 Each
		1.5	26M99-3360	1 Each
		3.0	26M99-3960	1 Each

Applications:

- Hydrocarbons
- Solvent impurities
- PCB congeners
- Aroclor mixes
- Simulated distillation
- Drugs of abuse
- Natural gas odorants
- Essential oils
- Pesticides

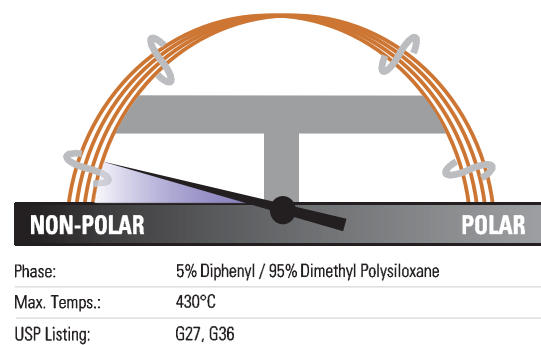
Similar to:

- | | |
|-----------|---------------|
| • MXT-1 | • SPB-1 |
| • DB-1 | • Equity-1 |
| • DB-1MS | • MDN-1 |
| • HP-1 | • CP-Sil 5 CB |
| • HP-1MS | • VF-1ms |
| • Ultra-1 | • ZB-1HT |

TraceGOLD TG-5MT Metal GC Columns

The most widely used MS phase in gas chromatography

- Low polarity phase, 5% phenyl methylpolysiloxane
- Low bleed for excellent signal-to-noise ratio, sensitivity and mass spectral integrity
- Exceptional inertness ideal for analysis of active compounds



TraceGOLD TG-5MT Metal GC Columns

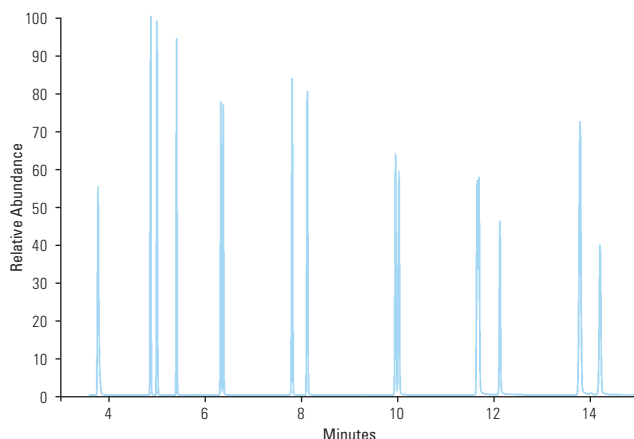
ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.1	26M98-0350	1 Each
		0.25	26M98-1300	1 Each
	30	0.25	26M98-1420	1 Each
		0.5	26M98-2230	1 Each
		1.0	26M98-2960	1 Each
		0.25	26M98-1540	1 Each
0.53	15	1.0	26M98-2860	1 Each
	30	0.25	26M98-1440	1 Each
		0.5	26M98-2250	1 Each
		1.0	26M98-2980	1 Each
		1.5	26M98-3360	1 Each
		3.0	26M98-3960	1 Each

Applications:

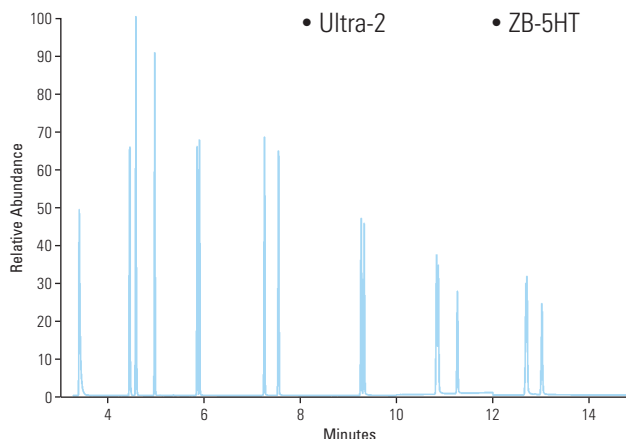
- Drugs
- Solvent impurities
- Pesticides
- Hydrocarbons
- PCB congeners
- Essential oils
- Semivolatiles

Similar to:

- MXT-5
- DB-5
- HP-5
- HP-5MS
- Ultra-2
- SPB-5
- Equity-5
- MDN-5
- CP-Sil 8 CB
- ZB-5HT



Sample TIC chromatogram of 16 PAHs analyzed on a TG-5MT metal GC column.



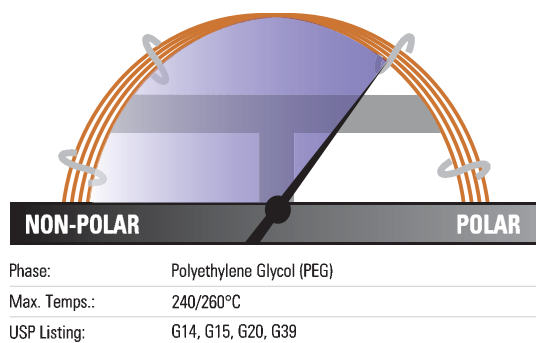
Sample TIC chromatogram of 16 PAHs analyzed on a TG-5MS GC column.

Only 15 peaks are shown here as Indeno(1,2,3-cd)pyrene and Dibenzo(a,h)anthracene coelute. They can be separated using MS. These chromatograms illustrate that the chromatography is not adversely affected by using a metal column over a silica column.

TraceGOLD TG-WaxMT Metal GC Columns

Manufactured for better column-to-column reproducibility

- Polar phase, polyethylene glycol
- Polar-deactivated surface tightly binds polymer for excellent thermal stability
- Resists oxidative damage from strongly acidic or basic volatiles better than silicone solid phases
- Equivalent to USP G14, G15, G20 and G39 phases



TraceGOLD TG-WaxMT Metal GC Columns

ID (mm)	Length (m)	Film Thickness (µm)	Cat. No.	Quantity
0.25	15	0.1	26M88-0350	1 Each
		0.25	26M88-1300	1 Each
	30	0.25	26M88-1420	1 Each
		0.5	26M88-2230	1 Each
		0.25	26M88-1540	1 Each
0.53	15	0.5	26M88-2130	1 Each
		1.0	26M88-2860	1 Each
	30	0.25	26M88-1440	1 Each
		0.5	26M88-2250	1 Each
		1.0	26M88-2880	1 Each
		1.5	26M88-3360	1 Each

Applications:

- FAMES
- Flavor compounds
- Essential oils
- Amines
- Solvents
- Xylene isomers
- EPA Method 603 for Acrolein/ Acrylonitrile

Similar to:

- MXT-WAX
- DB-WAX
- DB-WAXetr
- HP-Wax
- HP-Innowax
- Supelcowax 10
- CP-Wax 52 CB

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