






The right columns and consumables to maximize your environmental workflow

Our diverse portfolio of columns and consumables offers complete workflow solutions to support your environmental application needs.

Find our suggested products on thermofisher.com, organized by application area, and get the most out of your analysis.

General environmental workflow resources

-  Environmental Resource Library
-  Contaminant Analysis Information Library
-  Analytical Technology Solutions for U.S. Environmental Protection Agency (EPA) methods

| GC columns by application | | |
|----------------------------------------|-------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application | Cat. Number | Product Description |
| Volatile Organic Compounds (VOC) | 26080-4950 | Thermo Scientific™ TraceGOLD™ TG-VMS GC (20 m x 0.18 mm ID x 1 µm) for GC-MS Reference: EPA methods 502, 524, 8260, 624, TO-15, TO-17 |
| | 26098-2230 | Thermo Scientific™ TraceGOLD™ TG-5MS GC column (30 m x 0.25 mm ID x 0.5 µm) for GC-MS Reference: EPA method 8270E |
| Semi Volatile Organic Compounds (SVOC) | 26098-1425 | TraceGOLD TG-5MS GC column (30 m x 0.25 mm ID x 0.25 µm) with 5m GUARD Reference: AN10522 |
| | 26096-1420 | Thermo Scientific™ TraceGOLD™ TG-5SILMS GC column (30 m x 0.25 mm ID x 0.25 µm), very low bleed and ideal for GC-MS/MS |
| Polycyclic Aromatic Hydrocarbons (PAH) | 26055-0470 | Thermo Scientific™ TraceGOLD™ TG-PAH GC column, (30 m x 0.25 mm ID x 0.1 µm) |
| Polybrominated Diphenyl Ethers (PBDE) | 26061-0350 | Thermo Scientific™ TraceGOLD™ TG-PBDE GC Column, (15 m x 0.25 mm ID x 0.1 µm) Reference: AN10644 and AN10674 |
| Dioxin and Furan | 26066-1540 | Thermo Scientific™ TraceGOLD™ TG-Dioxin GC column, (60 m x 0.25 mm ID x 0.25 µm), Thermo Scientific™ Dioxin Analyzer Reference: AN10703 |
| Polychlorinated Biphenyl (PCB) | 26AJ148P | Thermo Scientific™ TRACE™ TR-PCB 8MS GC column (50 m x 0.25 mm ID x 0.25 µm) for GC-MS |
| | 260F296P | Thermo Scientific™ TRACE™ TR-5MS GC column (30 m x 0.25 mm ID x 0.25 µm) for GC method |
| | 26089-1420 | Thermo Scientific™ TraceGOLD™ TG-17MS GC columns, (30 m x 0.25 mm ID x 0.25 µm) Reference: CAN 121 |

| GC columns by application | | |
|---------------------------|-------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Application | Cat. Number | Product Description |
| Pesticides | 26RD142F | Thermo Scientific™ TraceGOLD™ Pesticide II (30 m x 0.25 mm ID x 0.25 µm) with 5 m Guard, GC-MS method |
| | 26078-5760 & 26077-1430 | Thermo Scientific™ TraceGOLD™ TG-OCP I, (30 m x 0.32 mm x 0.32 µm) & TraceGOLD TG-OCP II (30 m x 0.32 mm ID x 0.25 µm) for GC-ECD dual-column organochlorine pesticide Reference: EPA methods 8081, 608 |
| | 26076-2240 & 26075-5760 | Thermo Scientific™ TraceGOLD™ TG-OPP I, (30 m x 0.32 mm ID x 0.50 µm) & TraceGOLD TG-OPP II, (30 m x 0.32 mm ID x 0.32 µm) for GC-FPD or NPD dual-column organophosphorus pesticides Reference: EPA method 8141 |
| Haloacetic Acids | 26090-1420 | Thermo Scientific™ TraceGOLD™ TG-1701MS GC columns (30 m x 0.25 mm ID x 0.25 µm) for GC as primary column Reference: EPA method 552 |
| | 260F142P | Thermo Scientific™ TRACE™ TR-5MS GC column (30 m x 0.25 mm ID x 0.25 µm) for GC as confirmation column Reference: EPA method 552 |

 See our full portfolio of GC columns

Suggested sample vials by application

| Volatile Organic Compound (VOC) applications | |
|----------------------------------------------|----------------------------------------------------------------------------------------------|
| Cat. Number | Product Description |
| B7950 | EPA screw vial assembled kit, 40 mL, 100/PK for purge and trap |
| 20-HSV | 18 mL screw top headspace vials, clear 125/PK for headspace or SPME ARROW |
| 18-MSC-ST3HT | 18 mm magnetic screw cap, 8 mm hole, silicone/PTFE septa, 125/PK for headspace or SPME ARROW |
| C4000-S2W | 9 mm wide opening silanized amber screw thread vials, ID patch, 2mL, 100/PK |
| C5000-54B | 9 mm blue autosampler vial screw thread caps with PTFE/Silicone septum, 100/PK |
| SVOC/PAH/PBDE/PCB/Pesticides applications | |
| C4000-S2W | 9 mm wide opening silanized amber screw thread vials, ID patch, 2 mL, 100/PK |
| C5000-54B | 9 mm blue autosampler vial screw thread caps with PTFE/Silicone septum, 100/PK |
| Dioxin analysis | |
| 07-CPVA | 8 mm amber glass crimp top tapered vials, 0.7 mL, 100/PK |
| 8-AC-ST101 | 8 mm aluminum crimp cap, blue silicone/PTFE liner, 500/PK |

Suggested consumables for specific environmental applications

EPA 537 Determination of selected perfluorinated alkyl acids in drinking water by Solid Phase Extraction (SPE)

| Cat. Number | Product Description |
|--------------|---------------------------------------------------------------------------------------------------|
| 17626-102130 | Analytical column: Thermo Scientific™ Accucore™ RP, 2.6 µm, 2.1 x 100 mm |
| 28105-052130 | Isolator column: Thermo Scientific™ Hypersil™ BDS C18, 5 µm, 2.1 x 50 mm |
| 80100-62142 | Thermo Scientific™ Vanquish™ Flex Binary UHPLC system fitted with Thermo Scientific™ PFC free kit |

 [Learn more about EPA 537](#)

Microcystins in water direct injection method (EPA 545)

| Cat. Number | Product Description |
|--------------|--------------------------------------------------------------------------------|
| 25302-102130 | Thermo Scientific™ Hypersil GOLD™ aQ, 1.9 µm, 2.1 x 100 mm |
| C4000-S2W | 9 mm wide opening silanized amber screw thread vials, ID patch, 2 mL, 100/PK |
| C5000-54B | 9 mm blue autosampler vial screw thread caps with PTFE/Silicone septum, 100/PK |

Determination of microcystins in water with online concentration (EPA 544)

| Cat. Number | Product Description |
|--------------|----------------------------------------------------------------------------------------------------|
| 25012-022130 | Concentration column: Hypersil GOLD, 12 µm, 2.1 x 20 mm |
| 17326-052130 | Analytical column: Thermo Scientific™ Accucore™ aQ, 2.6 µm, 2.1 x 50 mm |
| 17126-102130 | Analytical column: Thermo Scientific™ Accucore™ C18, 2.6 µm, 2.1 x 100 mm |
| 60107-211 | Thermo Scientific™ HyperSep™ Retain PEP cartridges, 150 mg bed weight, 6 mL column capacity, 30/PK |
| C4000-S2W | 9 mm wide opening silanized amber screw thread vials, ID patch, 2 mL, 100/PK |
| C5000-54B | 9 mm blue autosampler vial screw thread caps with PTFE/Silicone septum, 100/PK |
| S7515-3 | 3 mL polypropylene lure-lok syringe |
| 42213-PV | Thermo Scientific™ Titan3™ 0.2 µm PVDF filter, 17 mm, 200/PK |

 [Learn about our Thermo Scientific™ EQuan MAX Plus™ system for water testing](#)

Suggested consumables for GC instrumentation

| Consumables for autosamplers | | | | | | |
|------------------------------------|-------------|---------------------------------------------------------------------------|-----|------|--------------------------------------------------|---------------------------------------------|
| Product Type | Cat. Number | Product Description | VOC | SVOC | Thermo Scientific™ AI/AS 1310 Series Autosampler | Thermo Scientific™ TriPlus RSH™ Autosampler |
| Syringes | 36520060 | 10 µL fixed needle syringe, 23 gauge, cone for general liquid injection | X | X | X | |
| | 365D0271 | 10 µL fixed needle syringe, 23S gauge, cone, for general liquid injection | X | X | | X |
| | 365L2321 | 2.5 mL headspace syringe, 23 gauge, up to 150 degrees | X | | | X |
| Solid Phase Microextraction (SPME) | 36SA10M5 | Development kit including five phases of SPME ARROWS | X | X | | X |

| Consumables for Thermo Scientific™ TRACE™ GC 1300 Series-ISQ/TSQ quadrupole systems | | | | | | | | |
|-------------------------------------------------------------------------------------|---------------|---------------------------------------------------------------------------------------|-----|------|-----|-----|----|---|
| Product Type | Cat. Number | Product Description | VOC | SVOC | SSL | PTV | MS | |
| Septa | 31303233-BP | BTO Septa, 50/PK, blister pack | X | X | X | X | | |
| Liners | 453A0415 | Direct straight liner, 1.7 mm ID, 3/PK, for SPME ARROW | X | X | X | | | |
| | 453A1335 | Direct straight liner, 1.2 mm ID, 5/PK, for headspace and purge & trap | X | | X | | | |
| | 453A1925-UI | LinerGOLD™ splitless liner, wool, 4 mm ID, 5/PK | X | X | X | | | |
| | 453A1255-UI | LinerGOLD SSL precision liner, wool, 4 mm ID, 5/PK | | X | X | | | |
| | 453T2845-UI | LinerGOLD PTV concentric baffle, 5/PK | X | X | | | X | |
| Liner Sealing Ring | 29001320 | Viton liner sealing ring for SSL, 5/PK | X | X | X | | | |
| | 29001318 | Liner sealing ring for PTV, 1/PK | X | X | | | X | |
| Inlet Seal | 290GA082 | Gold plated inlet seals, 2/PK | X | X | X | | | |
| | 29013820 | Silver seal (gasket), 2/PK | X | X | | | X | |
| Ferrules | 290VA191 | Graphite/vespel ferrule, 10/PK, for 0.1-0.25 mm ID GC columns | X | X | X | | | X |
| | 290VA192 | Graphite/vespel ferrule, 10/PK, for 0.32 mm ID GC columns | X | X | X | | | X |
| | 29053488 | Graphite ferrule, use with 0.25 mm ID GC columns for PTV | X | X | | | X | |
| | 29053487 | Graphite ferrule, use with 0.32 mm ID GC columns for PTV | X | X | | | X | |
| Column Nut | 35050458 | Column nut for SSL/GSV/FID/TCD/ECD/FPD/NPD, 5/PK | X | X | X | | | |
| | 35053221 | Terminal bottom fitting (Column Nut) for PTV, 5/PK | X | X | | | X | |
| | 1R120434-0010 | Spring loaded MS transfer line nut for ISQ and TSQ GC systems | X | X | | | | X |
| | 1R120434-0020 | Spring loaded MS transfer line nut for Exactive GC and Q Exactive GC Orbitrap systems | X | X | | | | X |

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