

## Environmental/EPA Methods

Analyte Type	Common Sample Preparation	Sample Matrix	Detector Type	EPA Method Reference	GS-Tek Column Recommendations (P/N)
<b>Semivolatiles</b>					
Benzidines	Liquid extraction	Waste water	MSD	605, 8270	GsBP-5MS, 30m x 0.25mm x 0.25um (1525-3002) GsBP-5MS, 30m x 0.25mm x 0.5um (1525-3005) GsBP-5, 30m x 0.53mm x 1.5um (0553-3015)
Chlorinated Disinfection Byproducts	Liquid extraction derivatization	Drinking water	ECD	551, 551.1A	GsBP-5MS, 30m x 0.25mm x 1.0um (1525-3010) GsBP-1MS, 30m x 0.25mm x 1.0um (1125-3010)
Chlorinated Hydrocarbons	Liquid extraction sonication, solvent extraction, SPE	Waste water solid waste	ECD	612, 8120, 8121	GsBP-5MS, 30m x 0.32mm x 0.5um (1532-3005) GsBP-1MS, 30m x 0.32mm x 0.5um (1132-3005)
Halogenated Acetic Acids	Liquid extraction derivatization	Drinking water	ECD	552, 552.1, 552.2	GsBP-35MS, 30m x 0.32mm x 0.25um (3532-3002)
Nitroaromatics and Isophorone	Liquid extraction sonication, solvent extraction, SPE	Waste water, solid waste	ECD, FID	609, 8090	GsBP-5MS, 30m x 0.25mm x 0.25um (1525-3002) GsBP-5, 30m x 0.53mm x 1.5um (0553-3015)
Nitrosamines	Liquid extraction sonication, solvent extraction, SPE	Waste water, solid waste	NPD	607, 8070	GsBP-5MS, 30m x 0.25mm x 0.25um (1525-3002) GsBP-5, 30m x 0.53mm x 1.5um (0553-3015)
Phenols	Liquid extraction sonication, solvent extraction, derivatization	Waste water, solid waste	ECD, FID	528, 604, 8040, 8041	GsBP-5MS, 30m x 0.25mm x 0.25um (1525-3002) GsBP-5, 30m x 0.53mm x 1.5um (0553-3015)
Phthalate Esters	Liquid extraction sonication, solvent extraction, SPE	Drinking water, waste water, solid waste	ECD, FID	506, 606, 8060, 8061	GsBP-5MS, 30m x 0.25mm x 0.25um (1525-3002) GsBP-5, 30m x 0.53mm x 1.5um (0553-3015)
Polynuclear Aromatic Hydrocarbons (PAHs)	Liquid extraction sonication, solvent extraction, SPE	Waste water solid waste	FID	610, 8100	GsBP-5MS, 30m x 0.25mm x 0.25um (1525-3002) GsBP-5MS, 30m x 0.32mm x 0.25um (1532-3002) GsBP-1MS, 30m x 0.25mm x 0.25um (1125-3002)
Volatiles	Purge/Trap, SPE	Water, Air/ Solid wastes, Solid	MSD	EPA 8260	GsBP-VMS, 60m x 0.25mm x 1.4um (6425-6014) GsBP-1MS, 30m x 0.25mm x 1.0um (1125-3010)
Semivolatile Organic Compounds	Liquid extraction sonication, solvent extraction, SPE	Drinking water, waste water, solid waste	MSD	525, 625, 8270	GsBP-5MS, 30m x 0.25mm x 0.5um (1525-3005)
<b>Volatiles</b>					
Acrylonitrile and Acrolein	Purge and trap, liquid extraction, sonication	Waste water, solid waste	FID, NPD	603, 8015, 8031	GsBP-624, 30m x 0.53mm x 3um (6253-3030)
EDB and DBCP	Microextraction with Hexane	Drinking water, solid waste	ECD	504.1, 8011	GsBP-VMS, 60m x 0.25mm x 1.4um, (6425-6014) GsBP-624, 30m x 0.53mm x 3um (6253-3030)
Purgeable Aromatic Organics	Purge and headspace for screening	Drinking water, tap water, waste water, solid waste	PID	503 .1, 602, 8020	GsBP-624, 30m x 0.53mm x 3um (6253-3030) GsBP-624, 30m x 0.25mm x 1.4um( 6225-3014)
Purgeable Halogenated Organics	Purge and trap headspace for screening	waste water, solid waste	PID, ELCD	601, 8010	GsBP-VMS, 60m x 0.25mm x 1.4um (6425-6014) GsBP-624, 75m x 0.53mm x 3um (6253-7530)
Trihalomethanes	Purge and trap, direct injection, headspace	Drinking water	ELCD, ECD	501	GsBP-624, 30m x 0.53mm x 3um (6253-3030) GsBP-VMS, 60m x 0.25mm x 1.4um (6425-6014)
Volatile Organic Compounds (VOCs)	Purge and trap, direct injection, headspace	Drinking water, waste water, solid waste	PID, ELCD	502.2, 8021, CLP-Volatiles	GsBP-502.2 105m x 0.53mm x 3.0um (6353-A530) GsBP-624, 75m x 0.53mm x 3um (6253-7530)

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Volatile Organic Compounds (VOCs) using 5973 MSD	Purge and trap, direct injection, headspace	Drinking water, waste water, solid waste	MSD (5973)	524.2, 624, 82, 408, 260, CLP-VOCs	GsBP-VMS, 20m x 0.18mm x 1.0um (6418-2010) GsBP-624, 25m x 0.20mm x 1.12um (6220-2510)
Volatile Organic Compounds (VOCs) using MSD	Purge and trap, direct injection, headspace	Drinking water, waste water, solid waste	MSD	524.2, 624, 82, 408, 260, CLP-VOCs	GsBP-VMS, 60m x 0.25mm x 1.4um (6425-6014) GsBP-624, 60m x 0.32mm x 1.8um (6232-6018)
<b>Pesticides, Herbicides and PCBs</b>					
N- and P- Containing Pesticides and Herbicides	Liquid extraction sonication, solvent extraction, SPE	Drinking water, waste water, solid waste	NPD, ELCD, FPD	507, 614, 619, 622, 8140, 8141A	GsBP-35MS, 30m x 0.25mm x 0.25um (3525-3002) GsBP-5MS, 30m x 0.25mm x 0.25um (1525-3002)
Organochlorine Pesticides and PCBs	Liquid extraction sonication, solvent extraction, SPE	Drinking water, waste water, solid waste	ECD	508.0, 608 8081A, 8082, CLP-Pesticides	GsBP-35MS, 30m x 0.32mm x 0.25um (3532-3002)
Phenoxy Acid Herbicides	Liquid extraction sonication, solvent extraction, SPE	Drinking water, waste water, solid waste	ECD	515, 615, 8150, 8151	GsBP-35MS, 30m x 0.32mm x 0.25um (3532-3002)