



EZSPE[®]

*Simple & Quick Solid Phase Extraction
for Water & Waste Water Analysis*

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With EZSPE you can perform solid phase extractions for 12 samples in less than 50 minutes achieving high recoveries and excellent precision for all analytes.

Simple to Operate	No Computer or Electronics
Fast	Runs 6-12 Samples in 20 ~ 50 min (depending on sample size)
High Throughput	Runs 6-12 Samples in Parallel
Flexible	Uses All SPE Cartridge Sizes
Semi Automated	Vacuum Sample Loading & Valve Selection for Separating Aqueous and Organic Waste
Quality Consumables	Guaranteed Certified Cartridges
Bottle Rinse	Automated Bottle Rinse
In-Line Drying	Elution In-line Extract Drying
Reliable	No Maintenance Required
Zero Cross-Contamination	No Shared Tubing & Fittings

After 30 years of leading automation in the field of Dioxin & PCBs analysis, FMS introduces EZSPE to further simplify the Solid Phase Extraction process and make it easier to perform. The EZSPE's impressive performance allows laboratories to reduce turnaround time and increase quality of the water & waste water analysis while reducing the cost.

Using vacuum & nitrogen, the EZSPE automatically loads the samples, rinses the sample bottle and delivers the solvent to the SPE cartridges. The analytes of interest are extracted and then dried using a sodium sulfate cartridge to remove all water. The final extract can be delivered directly to the "Direct to GC vial Vessel" ready for final concentration in the FMS SuperVap[®]. The process saves both labor and time.

Applications:

Drinking Water

Waste Water

Blood

Milk

Beverages



With the EZSPE you can run multi cartridge, multi fractionation applications for any SPE method requiring more than one cartridge or fraction.

The EZSPE system is designed to streamline your laboratory's workflow and increase productivity by automating the manual steps in your sample preparation process. The EZSPE system uses existing manual techniques. EPA Methods 625 and 8270D call for the extraction and analysis of

semi-volatile analytes in various matrices. Target analytes mentioned in the method cover a wide range of compound classes resulting in reporting lists that often approach hundreds of compounds.

EPA Method 508 Recoveries

Compound Name	Average %
TCMX	70
Alpha - BHC	81.6
Beta- BHC	93.9
Gamma- BHC (Lindane)	83.1
Delta- BHC	98.9
Heptachlor	82.5
Aldrin	80
Heptachlor Epoxide	89.8
Endosulfan I	87.8
4, 4- DDE	84
Dieldrin	85.9
Endrin	70.6
Endosulfan II	90.5
Endrin Aldehyde	119.1
4, 4 -DDD	81.7
Endosulfan sulfate	95
4,4 -DDT	96.2
Endrin Ketone	110.9
Methoxychlor	92.5
PCB-209	77.3

EPA Method 8270 Recoveries

Compound Name	Average (%)
Acenaphthylene	96
Benzyl butyl phthalate	93
Bis(2-ethylhexyl)phthalate	85
2-Chloronaphthalene	93
Di-n-butylphthalate	93
1,3-Dichlorobenzene	83
Diethylphthalate	108
Dimethylphthalate	104
Hexachloroethane	86
Naphthalene	91
2-Chlorophenol	100
2-Nitrophenol	94
Phenol	93
N-Nitrosodimethylamine	50
Aniline	91
Benzyl Alcohol	93
4-Chloroaniline	87
1,4-Dinitrobenzene	84
2-Methylphenol	93
3/4-Methylphenol	94
1-Methylnaphthalene	94
2-Methylnaphthalene	95
3-Nitroaniline	89
2-Nitroaniline	95
Pyridine	95

EPA Method 525.3 Recoveries

Compound Name	Average (%)
1,3-dimethyl-nitrobenzene	102.8
Acenaphthylene	92.6
Alachlor	106.8
Alpha Chlordane	100.6
Atrazine	120.1
Butachlor	124.9
Butylate	119.5
Carboxin	75.0
Chrysene-d12	91.1
Cycloate	114.4
DDD	109.0
DDE	101.1
Diazinon	97.4
Dieldrin	101.1
Dimethyl phthalate	105.5
Disulfoton	91.0
Endosulfan I	121.4
Endrin	120.2
Heptachlor epoxide	111.9
Isophorone	108.4
Methoxychlor	99.8
Metolachlor	112.0
Nanopropamide	110.4
Perylene-d12	105.9
Phenamiphos	109.4
Phenanthrene	104.8
Phenanthrene-d10	96.8
Prometon	119.1
Prometryn	122.8
Pyrene-d10	101.0
Simazine	123.0
Terbufos	107.8
Trans-Nonachlor	97.3
Trifluralin	107.7

Supports EPA Methods :

EPA Method 506	Phthalates and Adipate Esters
EPA Method 508.1	Chlorinated Pesticides, Herbicides, and Organohalides
EPA Method 515.2	Chlorinated Acids
EPA Method 521	Nitrosamines
EPA Method 525.2	Semi-volatiles
EPA Method 526	Semi-volatiles
EPA Method 527	Selected Pesticides and Flame Retardants
EPA Method 528	Phenols
EPA Method 529	Explosives
EPA Method 532	Phenylurea Compounds
EPA Method 535	Chloroacetanilide and other Acetamide Herbicides
EPA Method 548.1	Endothall
EPA Method 549.2	Diquat and Paraquat
EPA Method 550.1	PAH's
EPA Method 552.1	Haloacetic Acids and Dalapon
EPA Method 553	Benzidines and Nitrogen Containing Pesticides
EPA Method 608	Chlorinated Pesticides and PCB's
EPA Method 1613	Dioxin
EPA Method 1664A	Oil and Grease and SGT-HEM
EPA Method 1668A	Toxic PCB's by Isotope Dilution and GC/MS
EPA Method 1694	Pharmaceutical and Personal Care Products
EPA Method 8061	Phthalate esters
EPA Method 8081	TCLP Organochlorine pesticides
EPA Method 8082	PCB's
EPA Method 8095	Explosives
EPA Method 8141	Organophosphorus pesticides
EPA Method 8270	Semi Volatiles
EPA Method 8321	TCLP Phenoxyacid herbicides
EPA Method 8330	Nitroaromatics / Nitramines

"Direct-to-Vial Concentration"

The SuperVap-12 standalone direct-to-vial evaporation/concentration system is the ideal solution for performing the final evaporation and concentration step. SuperVap® evaporates the extracts and delivers final extracts in GC vials ready for GC/MS analysis.

