

EZSpeTM

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

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With EZSpe you can perform solid phase extractions for 6 samples in less than 50 minutes achieving high recoveries and excellent precision for all analytes.

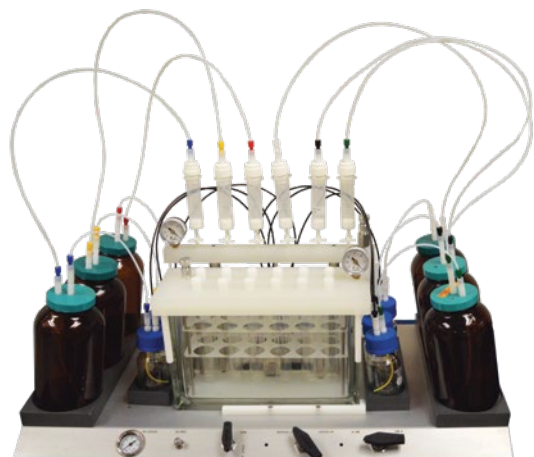
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|---------------------------------|--|
| Simple to Operate | No Computer or Electronics |
| Fast | Runs 6 Samples in 20 ~ 50 min (depending on sample size) |
| High Throughput | Runs 6 Samples in Parallel |
| Flexible | Uses All SPE Cartridge Sizes |
| 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 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.

