

EZprep 123TM

EZprep 123TM Simple & Quick

With EZprep 123, you can perform the entire sample preparation for Dioxins & PCBs with 3 simple steps. You can achieve high recoveries and excellent results for all analytes in less than 30 minutes.

EZprep 123™

Simple & Quick Sample Prep System
for Dioxins & PCBs Analysis

Simple to operate

Fast

Fat / Lipid Removal Capacity

Green Technology

High Throughput

Quality Consumable

Low Solvent

Reliable

No Cross-Contamination

Economical

Affordable

No Computer or Electronics

30 to 45 Minutes

Up to 5 grams (7 grams for special orders)

Zero DCM

6 Samples in Parallel

Guaranteed Certified Columns

As low as 90 ml Per Sample

No Electronic or Mechanical Components to Fail

No Tubing or Fittings

Column Kits to Meet Your Sample Matrix

No Capital Equipment Costs

Applications

Solids:

Fish

Feed

Meat

Soil

Fly Ash

Liquids:

Milk

Oil

Serum

Water

Waste Water

Imagine performing the sample cleanup for POPS analysis in minutes. Faster than all automated dioxin sample preparation systems, achieving the highest quality results with no computerized or mechanical system to fail, no service contract to pay and no downtime to worry about.

After 30 years of leading automation in the field of Dioxin & PCBs analysis, FMS introduces EZprep 123 to further simplify the dioxin sample preparation process and make it easier to perform. The EZprep 123's impressive performance allows Dioxin labs to reduce turnaround time and increase quality of the analysis while reducing the cost.

Green Technology Zero DCM

The EZprep 123 uses Zero DCM in the cleanup process. By design it produces greater efficiency to perform clean up while greatly reducing solvent consumption.

Fat / Lipid Removal Capacity 0.15 to 5 Grams

A wide variety of economical "cleanup columns kits" are available for Dioxin/PCB sample preparation.

Fast 30 to 45 Minutes

Depending on the Sample Matrix and Lipid content, samples can be run in 30 to 45 minutes, achieving high recoveries and excellent precision.

Low Solvent As Low as 90 ml Per Sample

Column kits designed for samples with different lipid contact allow for using the lowest possible amount of solvent to process a sample.

High Throughput 100's of Samples Per Day

EZprep 123 performs sample cleanup for 6 samples simultaneously achieving high recoveries and excellent precision for all analytes. The compact design of EZprep 123 allows several apparatuses to be placed in one hood performing hundreds of samples per day.

Simple and Quick 3 Easy Steps

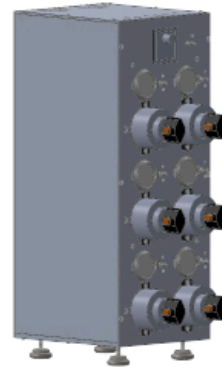
EZprep 123 uses a rotary work station to perform the entire sample cleanup quickly. One needs only to fill solvent reservoirs, install columns and start the process. From sample loading, to elution and fraction collection takes just 3 simple steps. Dioxins, PCBs and PBDEs are collected in tubes with GC vials ready for GCMS Analysis.

Reliable No Downtime

The simple design of the EZprep 123 virtually eliminates downtime. There are no electronics, valves, dispensing pump or sensitive mechanical components to fail.

Quality Consumables Certified Columns

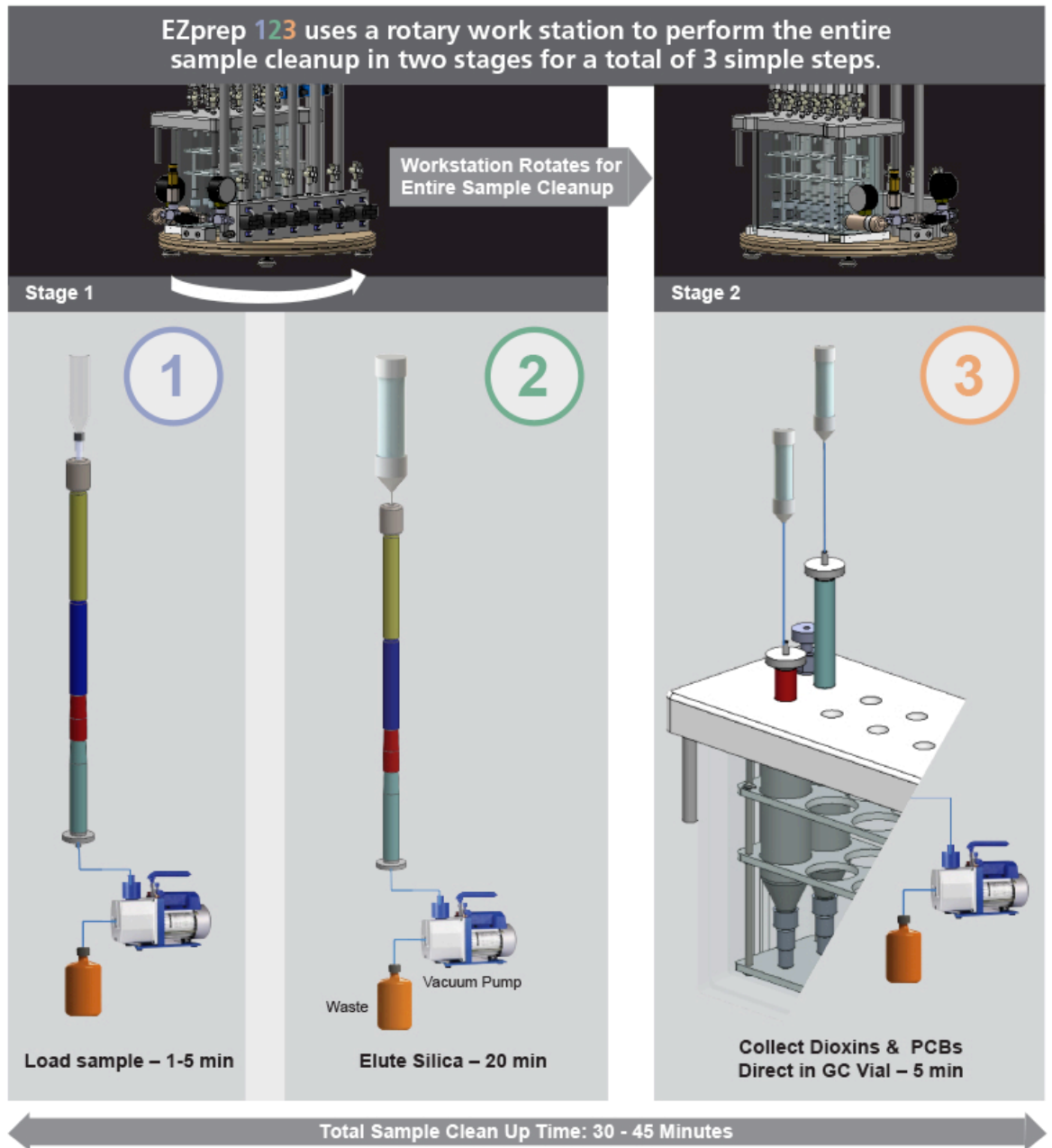
Guaranteed certified columns. A wide variety of economical, pre-packed, disposable cleanup columns are available for use with the EZprep 123 System. Column consumables are certified and guaranteed for cleanliness and performance.



ASD Module

Automated Solvent Delivery "ASD" Module

The optional ASD module automates solvent delivery of the EZprep System by eliminating manual solvent selection and loading. ASD delivers the exact amount of solvents with a precise flow rate to chromatography columns. The solvent delivery is very simple to use and is controlled by 6 pumps, a simple timer, flow selection switch and solvent selection valve. The ASD module also includes an over pressure safety feature which will automatically disable the pump and sound an alarm if over pressure is detected.



EZprep 123™

Simple & Quick Sample Prep System for Dioxins & PCBs Analysis

Typical Recoveries

13C PCBs Recoveries Matrices

| | Soil 5 g | Feed 10 g | Egg yolk 18 g | Olive oil 2 g | Fish oil 2 g | Hexane |
|---------|-------------|--------------|------------------|------------------|-----------------|--------|
| PCB 28 | 93 | 104 | 71 | 103 | 100 | 95 |
| PCB 52 | 90 | 108 | 69 | 100 | 97 | 95 |
| PCB 77 | 90 | 103 | 122 | 98 | 102 | 108 |
| PCB 81 | 92 | 99 | 60 | 102 | 98 | 92 |
| PCB 101 | 93 | 110 | 74 | 106 | 102 | 98 |
| PCB 105 | 108 | 101 | 61 | 110 | 104 | 106 |
| PCB 114 | 111 | 102 | 64 | 105 | 97 | 104 |
| PCB 118 | 86 | 103 | 60 | 91 | 89 | 102 |
| PCB 123 | 106 | 97 | 69 | 92 | 96 | 93 |
| PCB 126 | 107 | 102 | 89 | 102 | 98 | 115 |
| PCB 138 | 104 | 96 | 76 | 92 | 110 | 111 |
| PCB 153 | 101 | 102 | 68 | 102 | 114 | 102 |
| PCB 156 | 102 | 99 | 60 | 113 | 104 | 105 |
| PCB 157 | 93 | 97 | 60 | 103 | 99 | 108 |
| PCB 167 | 119 | 106 | 60 | 105 | 105 | 107 |
| PCB 169 | 98 | 98 | 81 | 96 | 96 | 117 |
| PCB 170 | 103 | 107 | 65 | 103 | 105 | 117 |
| PCB 180 | 98 | 106 | 84 | 102 | 102 | 107 |
| PCB 189 | 108 | 97 | 62 | 95 | 88 | 107 |

13C PCDD/Fs Recoveries Matrices

| | Soil 5 g | Feed 10 g | Egg yolk 18 g | Olive oil 2 g | Fish oil 2 g | Hexane |
|---------------|-------------|--------------|------------------|------------------|-----------------|--------|
| 2378-TCDF | 95 | 92 | 83 | 96 | 89 | 89 |
| 2378-TCDD | 104 | 101 | 70 | 101 | 96 | 101 |
| 12378-PeCDF | 86 | 92 | 85 | 97 | 78 | 80 |
| 23478-PeCDF | 102 | 94 | 69 | 102 | 98 | 91 |
| 12378-PeCDD | 85 | 93 | 75 | 60 | 71 | 100 |
| 123478-HxCDF | 88 | 105 | 79 | 92 | 92 | 95 |
| 123678-HxCDF | 103 | 109 | 80 | 102 | 94 | 99 |
| 234678-HxCDF | 73 | 66 | 80 | 60 | 95 | 104 |
| 123789-HxCDF | 107 | 92 | 92 | 95 | 89 | 95 |
| 123478-HxCDD | 107 | 95 | 79 | 95 | 92 | 95 |
| 123789-HxCDD | 82 | 84 | 87 | 81 | 86 | 91 |
| 1234678-HpCDF | 76 | 82 | 82 | 83 | 87 | 87 |
| 1234789-HpCDF | 91 | 84 | 93 | 84 | 81 | 84 |
| 1234678-HpCDD | 76 | 80 | 87 | 82 | 79 | 74 |
| OCDD | 60 | 67 | 60 | 60 | 91 | 70 |

Low Solvent Consumption

| Kit Type | Fat Removal Capacity | Solvent Consumption | Clean-up Time Minutes | Final Extract Before SuperVap | Final Extract After SuperVap |
|-------------------------|----------------------|---------------------|-----------------------|-------------------------------|------------------------------|
| Mini Low Fat Dioxin kit | 0.2 gram | 90 ml | 30 Min | 5 ml | 10 ul |
| High Capacity kit | 3 gram | 200 ml | 45 Min | 10 ml | 10 ul |



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 PCBs and Dioxins extracts in GC vials ready for GC/MS analysis

FMS
Fluid Management Systems