

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 7 Grams

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 7 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 content 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

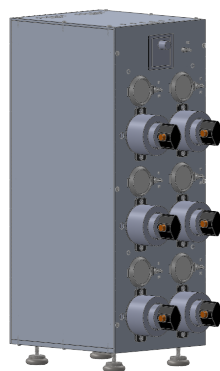
EZprep 123 uses a rotary work station to perform the entire sample cleanup quickly. One needs only to fill solvent reservoirs, install columns and start the process. From sample loading, to elution and fraction collection takes just 3 simple steps. Dioxins, PCBs and PBDEs are collected in tubes with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

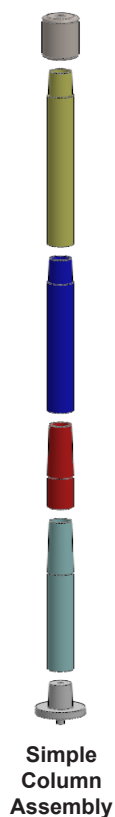
Guaranteed certified columns. A wide variety of economical, pre-packed, disposable cleanup columns are available for use with the EZprep 123 System. Column consumables are certified and guaranteed for cleanliness and performance.



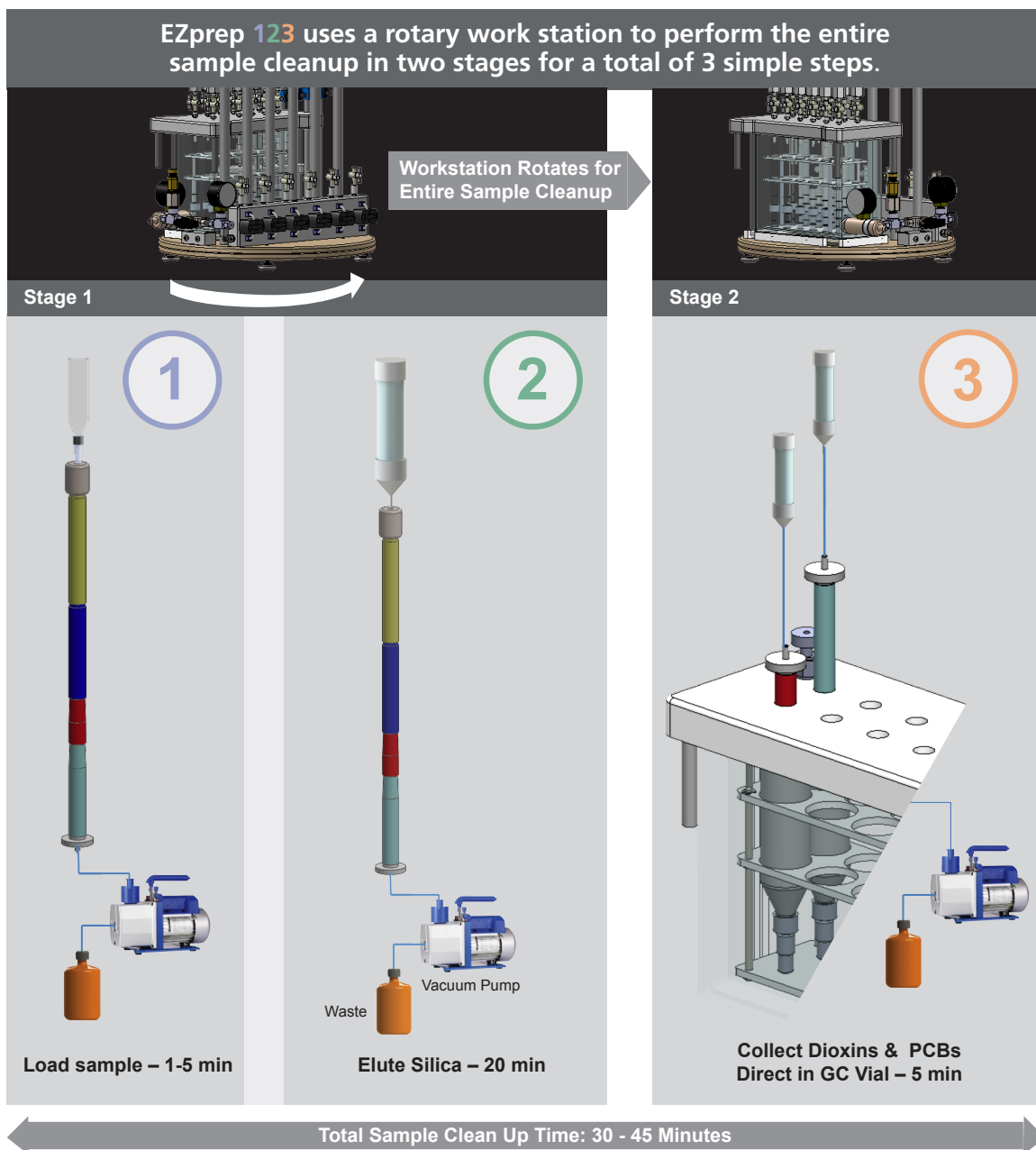
ASD Module

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.



Simple Column Assembly



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