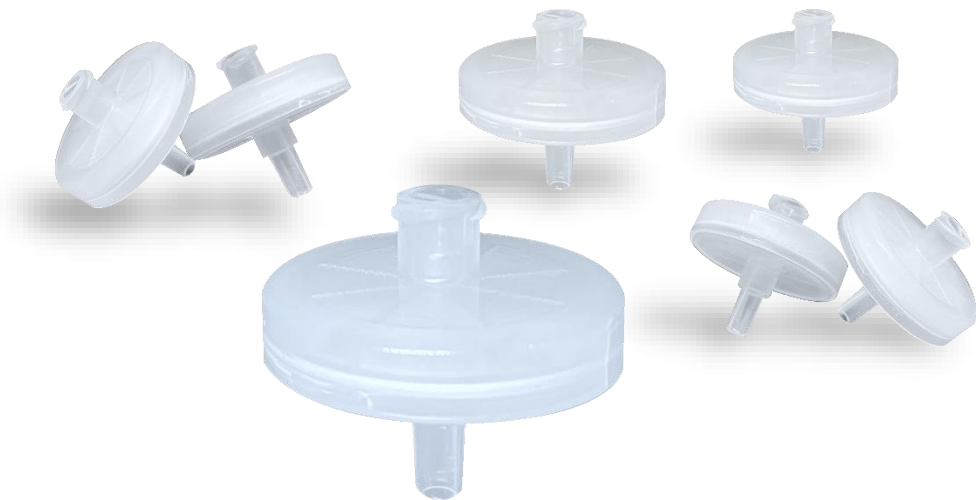


Solid Phase Extraction Disk Cartridge

EZ Cartridge RP-1



This product is manufactured using CDS
Empore™ membrane technology





Syringe Barrel



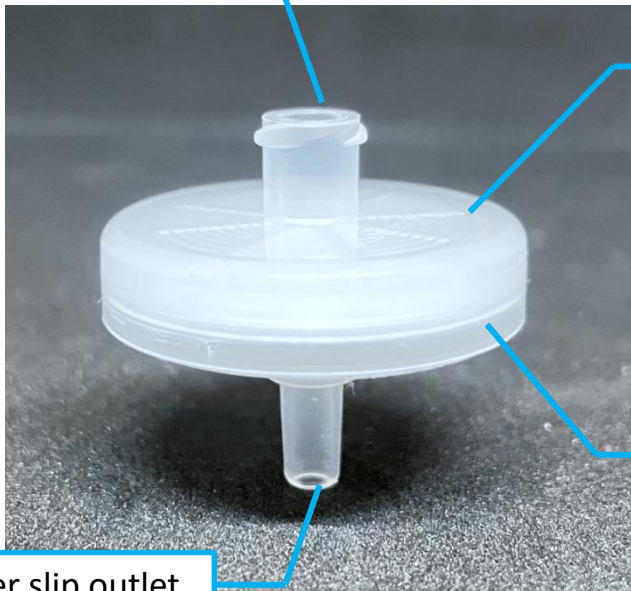
Luer Connect



Disk Cartridge

EZ Cartridge Structure

Luer lock inlet

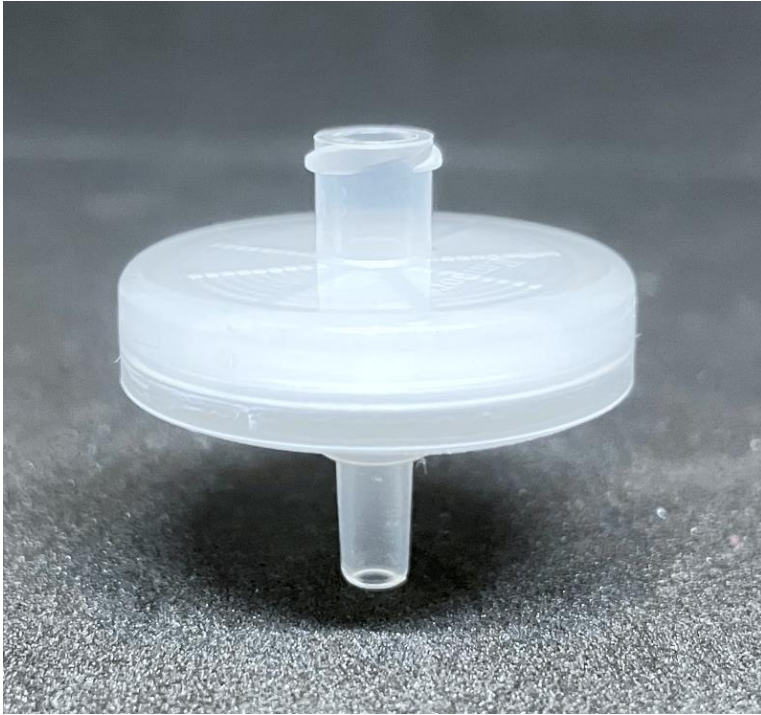


Polypropylene cartridge

Empore Disk SPE membrane
(Divinylbenzene-Methacrylate copolymer)

Luer slip outlet

Advantage of EZ Cartridge

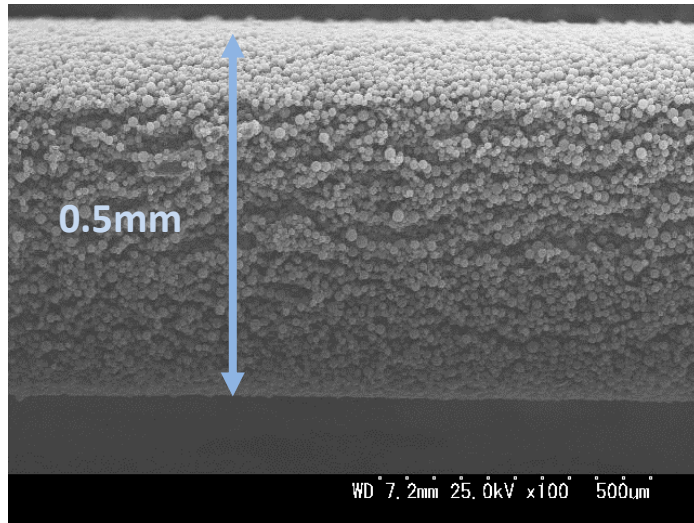


High Flow

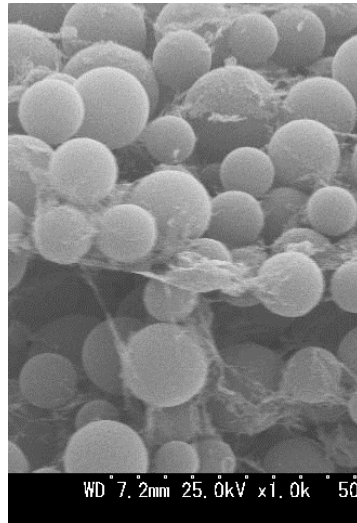
High Recovery

Easy to Automate

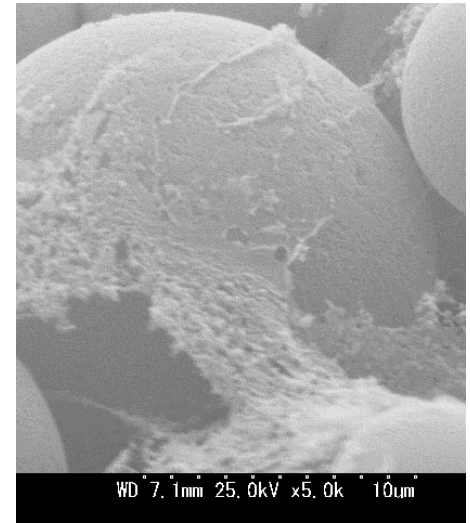
Solvent / PTFE : 90/10 (w/w)
Particle Size : 10 μm
Thickness : 0.5 mm



× 100



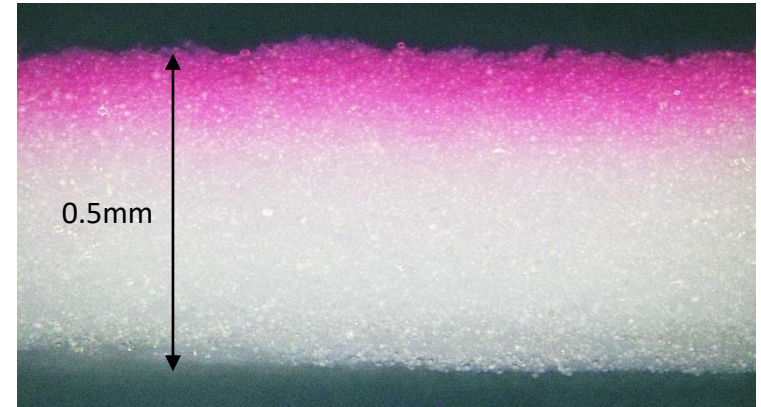
× 1000

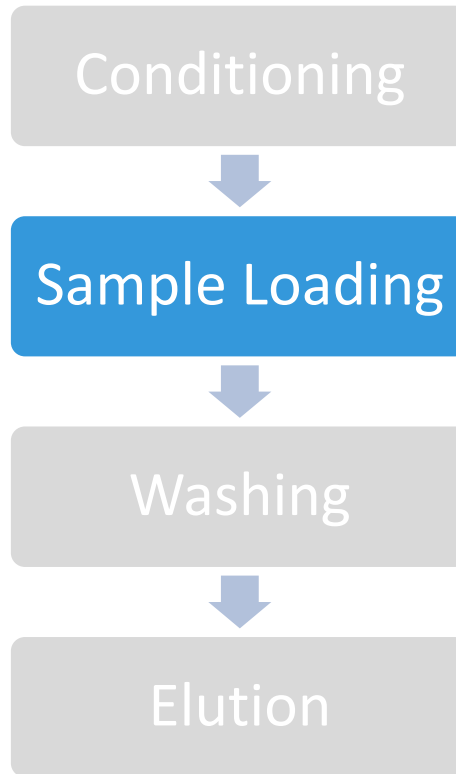


× 5000

Since it is fixed at a high density to a thickness of 0.5 mm, leakage loss of the desired component due to overdilution is less likely to occur, and it shows high holding capacity.

In addition, since the porosity (gap) is low, it is possible to elute efficiently with a small amount of solvent.





Sample Loading Time

1L Sample Loading Time



EZ Cartridge

10min

Up to 5x faster

Conventional Cartridge

50min

Difference of Sample Flow Rate

EZ Cartridge

Sample Volume

1000 mL

Flow Rate

50 mL/min

Time

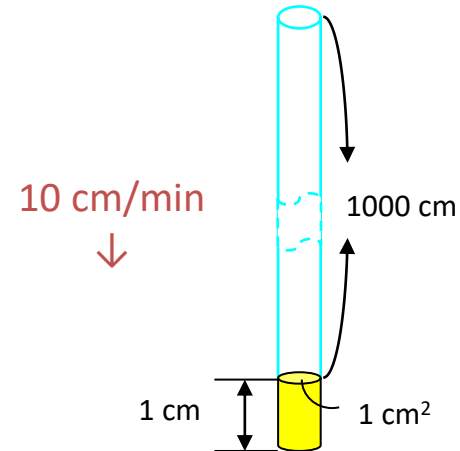
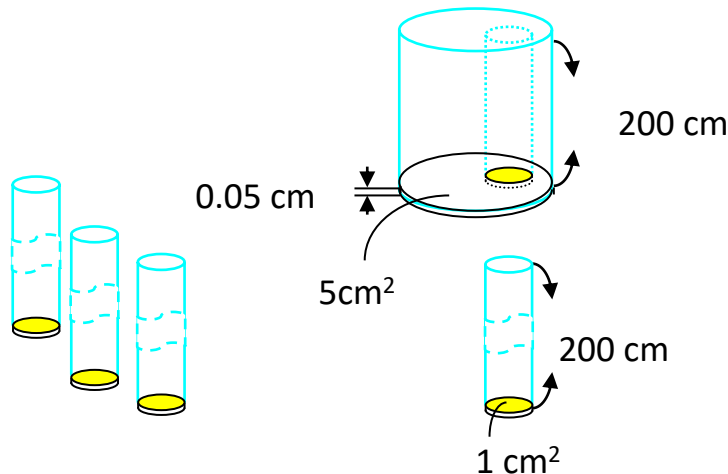
20 min

Conventional

1000 mL

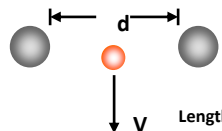
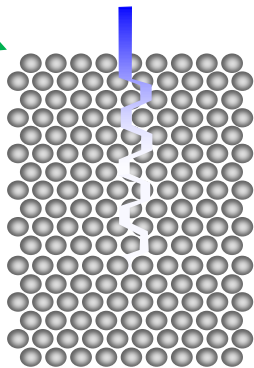
10 mL/min

100 min



EZ Cartridge

10 μ m

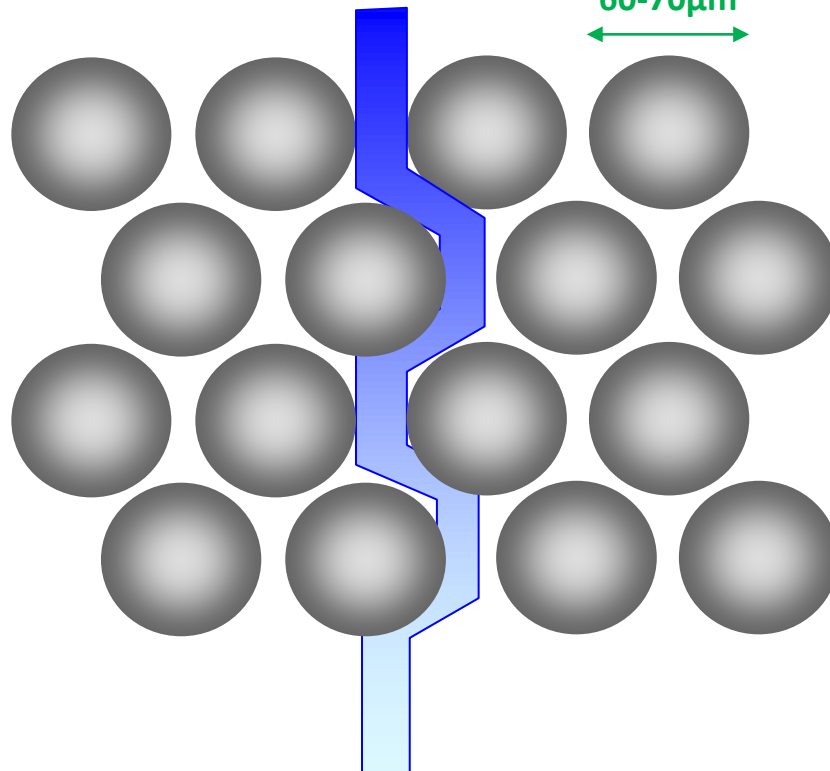


Length of stay $t_r = h/v$
Spread time $t_d = d^2/2D$

- The diffusion distance of the intended component is short.
- High extraction efficiency

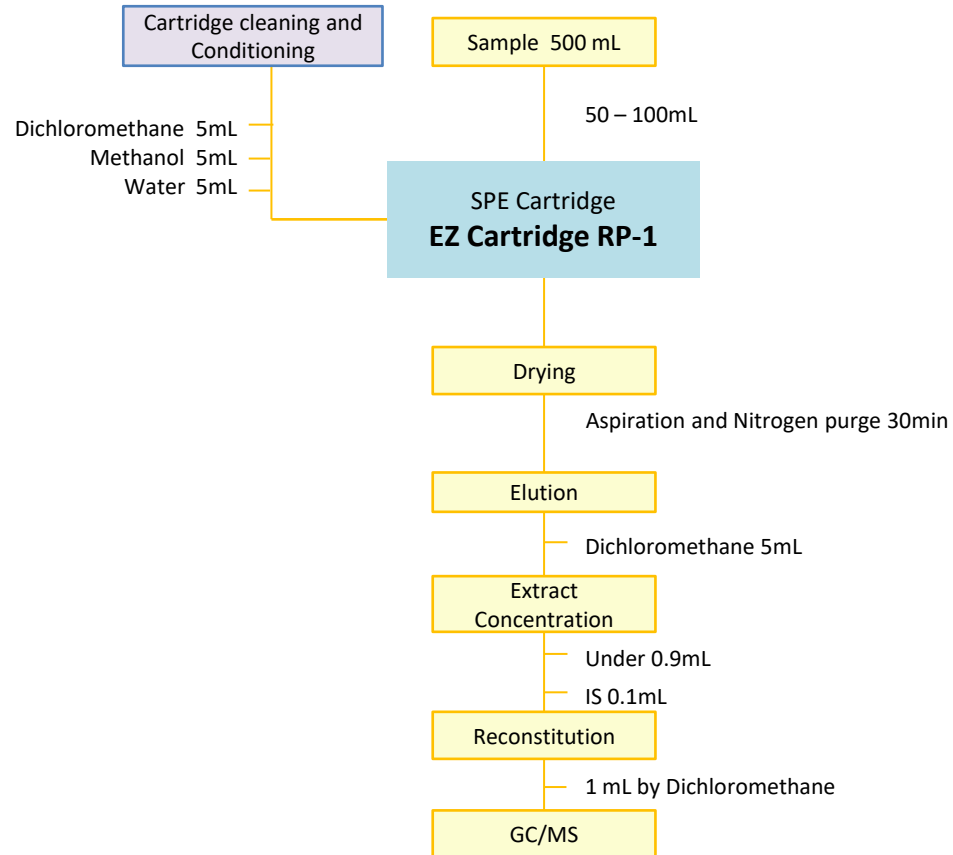
Conventional

60-70 μ m



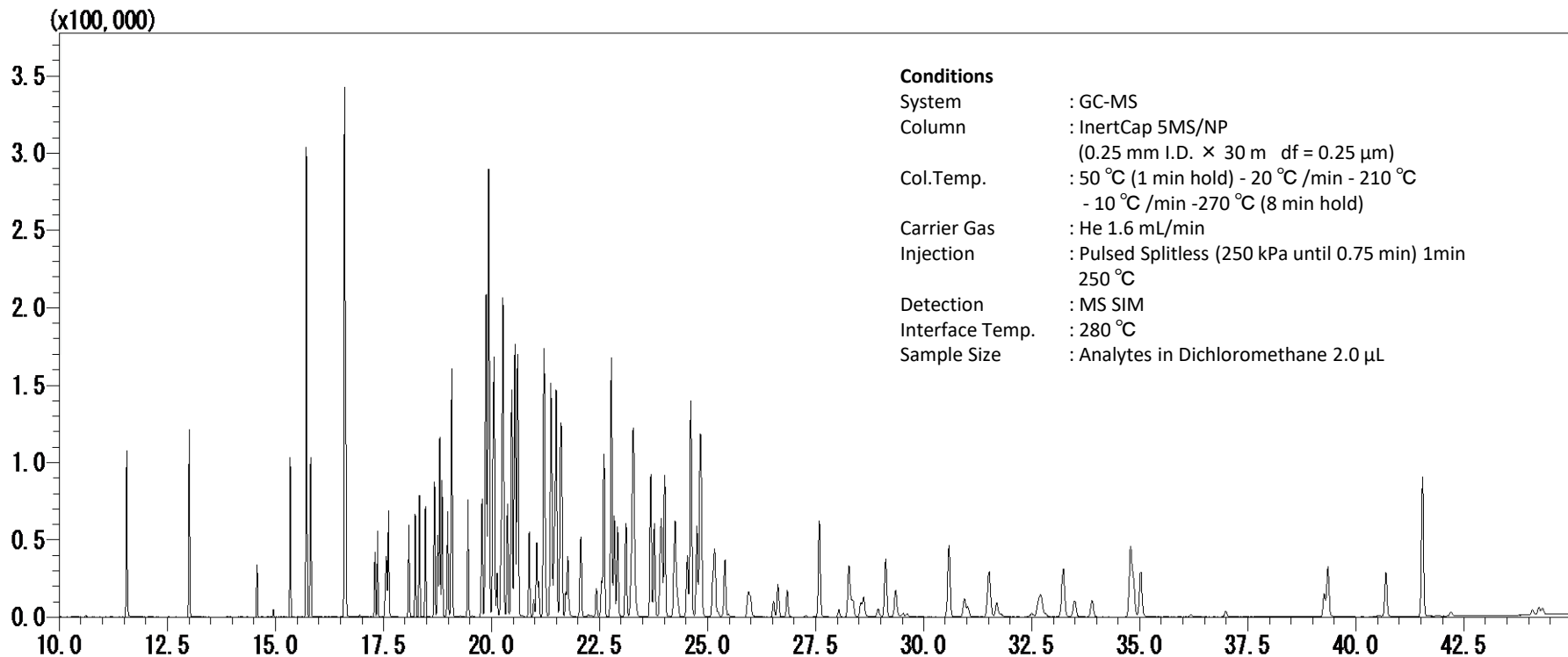
Application -Pesticides in Water-

SPE Procedure



Application -Pesticides in Water-

Chromatogram



Application -Pesticides in Water-

Recovery Rate

NO.	Flow Rate Compounds	100mL/min		50mL/min	
		Recovery Rate (%)	CV (%n=3)	Recovery (%)	CV (%n=3)
1	Dichlorvos	75.8	9.6	76.3	2.8
2	Etridiazole	65.9	11.0	70.4	4.3
3	Chloroneb	81.1	10.5	81.8	1.9
4	Isoproc carb	81.1	8.4	78.6	2.6
5	Fenobucarb	82.0	7.8	79.1	2.6
6	Pocopur(PHC)	77.9	4.2	80.3	3.2
7	Pecycuron	86.1	8.1	78.3	5.5
8	Simazine	83.5	4.9	67.6	4.6
9	Atrazine	83.4	5.0	77.8	4.4
10	Diazinon Oxon	82.3	5.9	76.2	6.6
11	Cyanophos(CYAP)	74.7	6.4	74.7	4.1
12	Propyzamide	85.3	5.6	76.0	4.9
13	Diazinon	77.3	7.8	73.7	4.3
14	Pyroquilon	79.1	6.8	78.8	2.8
15	Chlrothalonil(TPN)	75.2	4.3	71.7	3.9
16	Anthracene-d10	—	—	—	—
17	Ethylthiomethon	74.9	8.1	74.9	3.6
18	Iprobenfos	78.8	6.0	76.4	5.0
19	Tolclofos-methyl Oxon	83.0	5.2	78.4	4.5
20	Benfuresate	79.0	6.5	77.6	3.7
21	MEP Oxon	81.0	6.0	80.5	4.9
22	Terbucarb	83.3	5.8	78.0	5.4
23	Propanil(DCPA)	84.6	5.3	82.4	4.1
24	Bromobutide	80.6	4.8	75.5	6.6
25	Metribuzin	78.6	4.3	77.4	5.3
26	Malaonox	88.4	11.8	91.9	7.3
27	Simeconazole	78.8	5.1	76.2	5.9
28	Alachlor	82.5	5.6	77.7	4.2
29	Tolclofos-methyl	75.9	6.3	75.3	3.6
30	Simetryne	77.9	4.5	69.3	6.3
31	Metalaxyl	84.2	6.6	80.2	4.6
32	Ametryn	79.5	5.7	75.7	5.1
33	Cinmethylin	76.6	5.9	78.4	3.5
34	MPP Oxon	79.8	4.4	79.9	6.1
35	Fenitrothion	81.4	5.9	77.2	5.5
36	Bromacil	79.6	4.7	78.8	7.0

No.	Flow Rate Compounds	100mL/min		50mL/min	
		Recovery Rate (%)	CV (%n=3)	Recovery (%)	CV (%n=3)
37	(E)-Dimethylvinphos	82.2	5.2	82.7	7.3
38	Esprocarb	79.5	6.9	78.5	3.2
39	Malathon	85.9	4.8	79.6	5.3
40	Chlorpyrifos Oxon	86.9	7.2	81.0	6.7
41	Quinoclamine(ACN)	74.2	4.4	76.7	4.5
42	Metolachlor	78.2	5.8	75.4	4.9
43	Thiobencarb	81.8	5.9	79.3	1.8
44	(Z)-Dimethylvinphos	79.6	3.9	79.2	3.5
45	Cyanazine	78.8	3.4	79.4	3.9
46	Fenthion	79.9	5.8	77.5	3.3
47	Chlorthal-dimethyl(TCTP)	73.2	4.6	76.9	2.0
48	Isofenphos Oxon	83.2	8.8	76.3	7.7
49	Tetraconazole	76.9	5.0	73.6	5.9
50	Fthalide	81.5	4.0	79.1	2.7
51	Fosthiazate	83.2	6.3	89.9	3.7
52	Cyprodinil	75.2	5.2	74.3	3.8
53	Dimethametryn	80.0	6.2	72.5	5.8
54	Isofenphos	79.6	5.1	76.4	4.3
55	Methyldymron	80.2	4.5	77.9	3.5
56	Phenthoate	77.4	6.7	73.6	5.2
57	Captan	78.7	3.4	78.4	2.2
58	Procyimdone	85.4	4.9	81.4	2.3
59	Dimepiperate	77.6	5.6	76.4	4.5
60	Butamifos Oxon	75.2	8.5	74.3	7.2
61	Methidathion	84.7	4.8	77.1	4.8
62	Propaphos	75.5	6.8	73.1	5.7
63	Tetrachlorvinphos(CVMP)	78.2	5.0	79.1	5.8
64	Paclotrutzol	81.6	6.4	76.8	5.3
65	Butachlor	75.0	6.5	75.0	4.9
66	alpha-Endsulfan	73.1	5.5	77.7	2.4
67	9-Bromoanthracene	100.0	0.0	100.0	0.0
68	Butamifos	78.4	5.3	74.9	6.3
69	Napropamide	87.3	6.3	79.1	4.6
70	Flutolanil	88.9	5.4	80.1	5.6
71	(E)-Metomnostrobin	83.7	6.2	79.9	5.7
72	Pretilachlor	84.6	6.0	77.4	4.4

No.	Flow Rate Compounds	100mL/min		50mL/min	
		Recovery Rate (%)	CV (%n=3)	Recovery Rate (%)	CV (%n=3)
73	Isoprothiolane	86.7	5.1	81.5	2.8
74	Isoxathion Oxon	85.5	5.6	67.4	1.9
75	Uniconazole P	80.3	7.3	74.1	5.2
76	Thifluzamide	80.5	5.9	75.8	5.7
77	MPP Oxon Sulfoxide	81.3	5.3	91.6	4.2
78	MPP Oxon Sulfone	80.9	12.8	81.9	6.1
79	Buprofezin	77.4	6.1	77.4	3.2
80	Cyproconazole	78.1	8.4	73.4	6.0
81	(Z)-Pyriminobac-methyl	80.5	7.1	74.8	4.8
82	MPP sulfoxide	78.6	5.1	78.9	3.3
83	beta-Endsulfan	73.7	5.4	78.0	2.8
84	MPP sulfone	78.7	5.7	78.4	5.4
85	Mepronil	88.5	6.5	79.3	4.4
86	Chlornitrofen(CNP)	68.2	8.9	76.6	6.4
87	Edifenphos	87.7	4.8	79.2	5.8
88	Propiconazole1	85.1	6.1	74.9	7.3
89	Endsulfate	69.8	3.4	81.8	8.6
90	(E)-Pyriminobac-methyl	80.2	6.1	71.2	6.8
91	Propiconazole2	82.8	7.1	72.6	6.4
92	EPN Oxon	84.2	9.8	81.1	7.3
93	Thenylchlor	87.3	5.2	78.1	6.6
94	Tebuconazole	80.0	7.2	76.7	4.6
95	Pyridaphenthion	79.0	8.0	69.5	8.2
96	Acetamidrid	70.4	6.0	70.6	7.8
97	Iprodion	79.3	5.2	74.5	6.8
98	Chrysene-d12	—	—	—	—
99	EPN	73.0	9.4	77.9	6.9
100	Piperophos	71.7	10.1	66.0	7.8
101	Indanofan	72.3	11.5	29.6	6.4
102	Furametpyr	79.0	6.7	73.0	7.2
103	Iprodion-t	71.5	7.2	74.3	5.2
104	Mefenacct	79.2	6.4	74.7	6.9
105	CNP-amino	87.1	5.4	78.4	4.4
106	Etobenzanid	84.4	8.0	78.1	5.7
107	Cafenstrole	91.7	6.0	83.2	4.8
108	Boscalid	87.2	6.2	77.5	4.5
109	Thiacloprid	80.7	4.7	81.8	6.2
110	Pyrazoxyfen	81.5	6.4	79.9	4.2

Ordering Information

Description	Diameter	Sorbent	Qty.	Cat.No.
EZ Cartridge RP-1	25mm	Divinylbenzene- Methacrylate copolymer	50pcs	5010-30250



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