

中华人民共和国农业行业标准

NY/T XXXXX—XXXX

农药产品中有效成分定性筛查 液相色谱法

Qualitative screening of active ingredient in pesticide products by liquid
chromatography

(征求意见稿)

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前 言

本文件按照GB/T 1.1-2020《标准化工作导则 第1部分：标准化文件的结构和起草规则》的规定起草。

请注意本文件的某些内容可能涉及专利。本文件的发布机构不承担识别这些专利的责任。

本文件由农业农村部种植业管理司提出并归口。

本标准主要起草单位：河北省农药检定监测总站、农业农村部农药检定所、伊萌检测技术服务有限公司、河北省拓测检测服务有限公司。

本标准主要起草人： 。

农药产品中有效成分定性筛查 液相色谱法

1 范围

本文件确立了采用梯度洗脱液相色谱法定性筛查农药产品中有效成分的检测技术。
本文件适用于农药制剂产品中有效成分的定性筛查和未知农药成分的监测。

2 规范性文件

下列文件中的内容通过文中的规范性引用而构成本文件必不可少的条款。其中，注日期的引用文件，仅该日期对应的版本适用于本文件；不注日期的引用文件，其最新版本（包括所有的修改单）适用于本文件。

3 术语和定义

下列术语和定义适用于本文件。

3.1 梯度洗脱 gradient elution

是指在液相色谱法的同一个分析周期中，按一定程度不断改变中流动相的浓度配比，又称为梯度淋洗或程序洗脱。

3.2 农药成分 pesticide ingredient

是指农药产品中所含的农药的标签、说明书标注的有效成分，或在农药制剂产品中添加的国内或在国外已取得农药登记的成分，而未在产品标签中标注的成分。

4 试验方法

4.1 油溶性农药成分

4.1.1 方法提要

试样用混合溶剂溶解，以甲醇+乙腈+水为流动相，使用以C₁₈为填料的不锈钢柱和紫外检测器，以邻苯二甲酸二甲酯和邻苯二甲酸二丁酯为混合内标物，在波长245nm下，对试样中的农药成分进行高效液相色谱分离和测定。

4.1.2 试剂和溶液

甲醇：色谱级；

乙腈：色谱级；

丙酮：色谱级；

水：新蒸二次蒸馏水；

混合溶剂： ψ （甲醇+乙腈）=50+50（v/v）；

邻苯二甲酸二甲酯：色谱固定液；

邻苯二甲酸二丁酯：色谱固定液；

混合内标溶液：分别称取0.5g（精确至0.0002g）邻苯二甲酸二甲酯和邻苯二甲酸二丁酯，于500mL容量瓶中，加入100mL混合溶剂超声溶解，并用混合溶剂定容至刻度；

农药标样：已知质量分数 $\geq 98.0\%$ 。

4.1.3 仪器

高效液相色谱仪：具有二元高压梯度泵和二极阵列检测器；

色谱工作站；

色谱柱：250mm \times 4.6mm（i.d.）不锈钢柱，内装Agilent Eclipse plus C₁₈、5 μ m填充物（或具同等效果的色谱柱）；

过滤器：滤膜孔径约0.45 μ m；

微量进样器：50 μ L；

定量进样管：10 μ L；

超声波清洗器。

4.1.4 高效液相色谱操作条件

流动相：梯度洗脱法。A: ψ （甲醇+乙腈）=50+50，B: 水；流动相比比例和洗脱时间程序见表1。

表1 流动相比比例和洗脱时间程序

序号	时间/min	A	B	备注
1	0.01~5.00	20	80	
2	5.01~9.00	40	60	
3	9.01~12.00	60	40	
4	12.01~20.00	70	30	
5	20.01~28.00	80	20	
6	28.01~42.00	90	10	
7	42.01~43.00	60	40	
8	43.01~50.00	20	80	

流速：0.8mL/min；

柱温：室温（温度变化应不大于2 $^{\circ}$ C）；

检测波长：245nm；

进样体积：10 μ L。

保留时间(min)：内标物 邻苯二甲酸二甲酯18.254、邻苯二甲酸二正丁酯32.807，农药成分氟吡呋喃酮15.931。

上述操作参数是典型的，可根据不同仪器特点，对给定的操作参数作适当调整，以期获得最佳效果。典型的氟吡呋喃酮和内标物高效液相色谱图见图1。

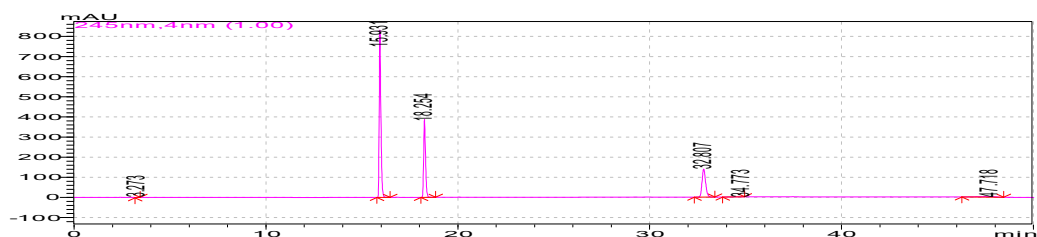


图1 氟吡呋喃酮-内标物的典型高效液相图

4.1.5 测定步骤

4.1.5.1 标样溶液的制备

分别称取0.01g（精确至0.00002g）农药标样于25mL容量瓶中，准确移取10mL混合内标溶液，再用混合溶剂定容至刻度，超声波振荡5min溶解，冷却至室温，摇匀。

4.1.5.2 试样溶液的制备

称取试样0.1g（已知物可根据农药标签示值适量称取）于25mL容量瓶中，准确移取10mL混合内标溶液，再用混合溶剂定容至刻度，超声波振荡5min溶解，冷却至室温，摇匀。

4.1.5.3 空白溶液的制备

称取试样0.1g（已知物可根据农药标签示值适量称取）于25mL容量瓶中，用混合溶剂定容至刻度，超声波振荡5min溶解，冷却至室温，摇匀。

4.1.5.4 测定

在上述操作条件下，待仪器稳定后，连续注入数针标样溶液，直至相邻两针农药成分峰面积相对变化小于1.2%后，按照标样溶液、标样溶液、试样溶液、试样溶液的顺序进行测定。同时，做空白测定。

4.1.6 计算

农药成分与内标物保留时间比 γ_I 按下列公式（1）计算，农药成分保留时间 $t_{库1}$ 按下列公式（2）计算：

$$\gamma_I = \frac{t_{测1}}{t_{内1}} \dots\dots\dots (1)$$

$$t_{库1} = t_{测1} \times \frac{t_{内库1}}{t_{内1}} \dots\dots\dots (2)$$

式中：

γ_I —试验测定中农药成分与内标物的相对保留时间之比；

$t_{测1}$ —试验测定中农药成分的相对保留时间，min；

$t_{内1}$ —试验测定中内标物的相对保留时间，min；

$t_{库1}$ —数据库中查询未知农药成分的相对保留时间，min；

$t_{内库1}$ —数据库中内标物的相对保留时间，min；

注：1）因农药成分最大吸收波长不同，查看其保留值时，可根据实际情况，分别选取210nm、270nm等确定其保留时间。

2）查询未知农药成分保留时间，一般以农药成分与相对临近的内标物保留时间折算。

4.2 水溶性农药成分

4.2.1 方法提要

试样用流动相溶解，以乙腈+磷酸二氢钾-磷酸缓冲液为流动相，使用以SAX为填料的不锈钢柱

和紫外检测器，以邻苯二甲酸二甲酯为内标物，在波长202nm下，对试样中的农药成分进行高效液相色谱分离和测定。

4.2.2 试剂和溶液

乙腈：色谱级；

水：新蒸二次蒸馏水；

磷酸：分析纯；

邻苯二甲酸二甲酯：色谱固定液；

磷酸二氢钾-磷酸缓冲液：0.03mol/L水溶液。称取1.02g磷酸二氢钾置于250mL容量瓶中，用水超声溶解并稀释至刻度，再用磷酸配制成 pH =2.0的磷酸二氢钾-磷酸缓冲液；

流动相：乙腈+磷酸二氢钾-磷酸缓冲液 = 5+95；

内标溶液：称取0.2g（精确至0.0002g）邻苯二甲酸二甲酯，于500mL容量瓶中，加入10mL乙腈超声溶解，并用流动相定容至刻度；

农药成分标样：已知质量分数≥98.0%。

4.2.3 仪器

高效液相色谱仪：具有二元高压梯度泵和二极阵列检测器；

色谱工作站；

色谱柱：250mm×4.6mm（i. d.）不锈钢柱，内装HYPERSIL SAX、5μm填充物（或具同等效果的色谱柱）；

过滤器：滤膜孔径约0.45μm；

微量进样器：50 μL；

定量进样管：10 μL；

超声波清洗器。

4.2.4 高效液相色谱操作条件

流动相：梯度洗脱法。A:乙腈，B: 磷酸二氢钾缓冲液；流动相比比例和洗脱时间程序见表2。

表2 流动相比比例和洗脱时间程序

序号	时间/min	A	B	备注
1	0	5	95	
2	0.01~3.00	5	95	
3	3.01~8.00	10	90	
4	8.01~12.00	15	85	
5	12.01~16.00	20	80	
6	16.01~20.00	25	75	
7	20.01~22.00	10	90	
8	22.01~30.00	5	95	

流速：0.8mL/min；

柱温：室温（温度变化应不大于2℃）；

检测波长：202nm；

进样体积：10 μL。

保留时间(min): 农药成分(四聚乙醛) 4.622, 内标物(邻苯二甲酸二甲酯) 5.022。

上述操作参数是典型的, 可根据不同仪器特点, 对给定的操作参数作适当调整, 以期获得最佳效果。典型的四聚乙醛和内标物高效液相色谱图见图2。

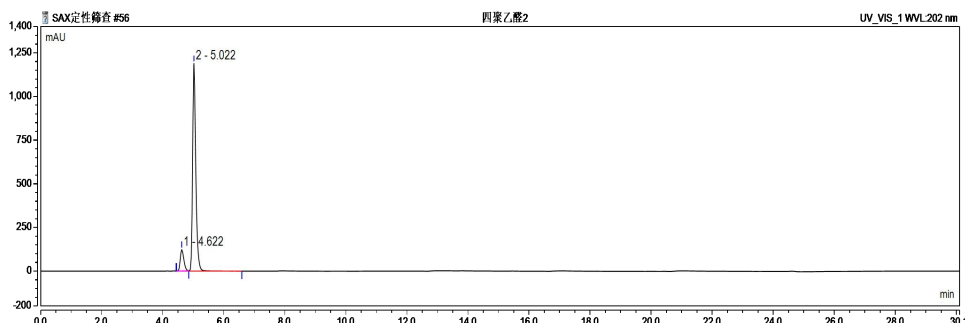


图1 四聚乙醛和内标物的典型高效液相色谱图

4.2.5 测定步骤

4.2.5.1 标样溶液的制备

分别称取0.01g(精确至0.00002g)农药标样于25mL容量瓶中, 准确移取5mL内标溶液, 再用流动相定容至刻度, 超声波振荡5min溶解, 冷却至室温, 摇匀。

4.2.5.2 试样溶液的制备

称取试样0.1g(已知物可根据农药标签示值适量称取)于25mL容量瓶中, 准确移取5mL内标溶液, 再用流动相定容至刻度, 超声波振荡5min溶解, 冷却至室温, 摇匀。

4.2.5.3 空白溶液的制备

称取试样0.1g(已知物可根据农药标签示值适量称取)于25mL容量瓶中, 用流动相定容至刻度, 超声波振荡5min溶解, 冷却至室温, 摇匀。

4.2.5.4 测定

在上述操作条件下, 待仪器稳定后, 连续注入数针标样溶液, 直至相邻两针农药成分峰面积相对变化小于1.2%后, 按照标样溶液、标样溶液、试样溶液、试样溶液的顺序进行测定。同时, 做空白测定。

4.2.6 计算

农药成分与内标物保留时间比 γ_2 按下列公式(3)计算, 农药成分保留时间 $t_{库2}$ 按下列公式(4)计算:

$$\gamma_2 = \frac{t_{测2}}{t_{内2}} \dots \dots \dots (3)$$

$$t_{库2} = t_{测2} \times \frac{t_{内库2}}{t_{内2}} \dots \dots \dots (4)$$

式中:

γ_2 —试验测定中农药成分与内标物的相对保留时间之比，min；

$t_{测2}$ —试验测定中农药成分的相对保留时间，min；

$t_{内2}$ —试验测定中内标物的相对保留时间，min；

$t_{库2}$ —数据库中查询未知农药成分的相对保留时间，min；

$t_{内库2}$ —数据库中内标物的相对保留时间，min；

注：因农药成分最大吸收波长不同，查看其保留值时，可根据实际情况，分别选取245nm、280nm等确定其保留时间。

4.7 建立数据库

4.7.1 收集各农药成分的保留时间，建立农药成分—保留时间比值对应信息数据库。见附录1、附录2。

4.7.2 收集各农药成分紫外光谱图，建立农药成分—紫外光谱图对应信息数据库。见附录3、附录4。

4.8 农药定性

4.8.1 保留时间确证

利用上述操作条件下测得的试样样品的保留时间比值，对应查找农药成分—保留时间比值对应信息数据库，锁定 $(t \pm 2)$ min， $\gamma \pm 1$ 范围内的农药成分。再按4.8.2进行。

4.8.2 紫外光谱图确证

经4.8.1初步确证的多种农药成分，查找对应的农药成分—紫外光谱图对应信息数据库。对锁定的疑似农药成分，再按4.8.3进行。

4.8.3 辅助信息确证

经上述确诊为疑似的农药成分，利用植保信息、外观等理化特性，结合产品标签标注信息和使用特点，进一步判定是否含有的农药成分。对确证的农药成分再按4.8.4进行。

4.8.4 利用农药标样确证

对经过上述方法确证的农药成分，查找相应国家、行业标准或文献资料。根据文献资料中检测方法，称取适量农药标样和样品，配制标样和试样溶液，进一步确定农药成分，确定为某种农药成分的，同时进行定量测定。

5 结果表示

根据上述测定结果，给出农药成分的具体名称和含量。

附录 1
农药成分—保留值信息数据库（仪器—岛津）

序号	农药名称	农药成分与内标物保留时间 (min)			农药成分与内标物保留 值比		最大吸收波长 (nm)
		农药成分保留 时间	邻苯二甲酸二甲酯	邻苯二甲酸二丁酯	农药成分与邻苯二甲酸二甲酯保留值比	农药成分与邻苯二甲酸二正丁酯保留值比	
1	调环酸钙盐	2.333	18.2	32.581	0.1282	0.0716	273
2	双丙胺磷钠	2.422	18.372	33.66	0.1318	0.0720	198
3	福美肿 I	2.438	18.062	32.528	0.1350	0.0750	254 280
4	磺草灵	2.46	18.416	33.687	0.1336	0.0730	256
5	氯溴异氰尿酸 I	2.464	18.055	32.512	0.1365	0.0758	198
6	多抗霉素 B	2.492	18.085	32.605	0.1378	0.0764	204 263
7	威百亩	2.497	18.304	33.374	0.1364	0.0748	205 250 283
8	氯丙嘧啶酸	2.531	18.32	33.061	0.1382	0.0766	230 283
9	氯胺吡啶酸	2.532	18.152	32.492	0.1395	0.0779	216 245
10	噻菌铜	2.535	18.235	32.834	0.1390	0.0772	210 233
11	皂素	2.537	18.35	33.592	0.1383	0.0755	243
12	二氯吡啶酸	2.54	18.477	34.123	0.1375	0.0744	218 280
13	敌草快	2.543	18.218	33.175	0.1396	0.0767	210
14	甲咪唑烟酸	2.582	18.135	32.792	0.1424	0.0787	275
15	百草枯	2.594	18.54	34.126	0.1399	0.0760	210
16	抑芽丹	2.586	18.056	32.439	0.1432	0.0797	215 330
17	普施特	2.598	18.348	33.62	0.1416	0.0773	199
18	硝基磺草酮	2.604	18.471	34.027	0.1410	0.0765	256
19	磺草酮	2.608	18.461	33.998	0.1413	0.0767	257
20	氨基吡啶酸	2.622	18.36	33.742	0.1428	0.0777	222
21	胺鲜酯柠檬酸盐	2.63	18.935	34.423	0.1389	0.0764	211
22	咪唑乙烟酸	2.632	18.453	33.988	0.1426	0.0774	199 275
23	咪唑烟酸	2.632	18.284	32.883	0.1440	0.0800	264
24	甲氧咪草烟	2.642	18.229	32.801	0.1449	0.0805	275
25	三磷锡	2.661	18.403	33.796	0.1446	0.0787	225
26	氯溴异氰尿酸 II	2.667	18.055	32.512	0.1477	0.0820	212
27	咪草烟	2.667	18.327	33.487	0.1455	0.0796	199
28	代森锰锌 I	2.677	18.198	33.079	0.1471	0.0809	243
29	草甘膦	2.679	18.294	33.402	0.1464	0.0802	205
30	亚硝基草甘膦	2.689	18.312	33.464	0.1468	0.0804	244
31	丙烯酸	2.69	18.405	33.809	0.1462	0.0796	199
32	丁酰肼	2.637	18.229	33.131	0.1447	0.0796	200

33	吡啶乙酸	2.710	18.145	32.778	0.1494	0.0827	219 280
34	申嗉霉素	2.757	17.948	32.146	0.1536	0.0858	252 366
35	赤霉素（酸）	2.779	18.415	33.768	0.1509	0.0823	195
36	苯唑草酮	2.796	18.177	32.76	0.1538	0.0853	254 312
37	单噻磺隆	2.840	18.174	32.692	0.1563	0.0869	239
38	硝磺草酮	2.891	18.225	33.192	0.1586	0.0871	257
39	氯甲喹啉酸	2.942	18.172	32.546	0.1619	0.0904	214 230
40	噻酮磺隆	2.968	18.164	32.681	0.1634	0.0908	240
41	灭草喹	3.011	18.334	33.489	0.1642	0.0899	239
42	甲磺隆	3.035	18.431	33.966	0.1647	0.0894	234
43	噻磺隆	3.034	18.427	33.96	0.1646	0.0893	234
44	氯氟吡氧乙酸（氟草定）	3.040	18.547	34.32	0.1639	0.0886	210
45	异丙胺	3.065	18.297	33.463	0.1675	0.0916	197 279
46	氯磺隆	3.07	18.489	34.184	0.1660	0.0898	236
47	二氯喹啉酸	3.091	18.267	33.411	0.1692	0.0925	213 238
48	环丙环酰胺	3.097	18.097	32.333	0.1711	0.0958	245
49	(+)-脱落酸 I	3.102	18.205	32.644	0.1704	0.0950	245
50	单噻磺酯 I	3.102	18.242	32.8	0.1700	0.0946	239
51	酰噻磺隆	3.111	18.197	32.592	0.1710	0.0955	241
52	酰噻磺隆 I	3.127	18.264	32.741	0.1712	0.0955	241
53	唑噻磺草胺	3.128	18.213	33.128	0.1717	0.0944	277
54	单氰胺	3.129	18.171	32.641	0.1722	0.0959	210
55	氟唑磺隆 I	3.137	18.094	32.607	0.1734	0.0962	235
56	四唑噻磺隆	3.140	18.181	32.62	0.1727	0.0963	242
57	呋喃磺草酮 I	3.169	18.224	32.754	0.1739	0.0968	203 259
58	2,4-二硝基苯酚钠	3.178	18.233	32.794	0.1743	0.0969	221 361
59	对氯苯氧乙酸钠	3.182	18.189	32.565	0.1749	0.0977	226
60	(+)-脱落酸 II	3.294	18.205	32.644	0.1809	0.1009	245
61	苯甲酸	3.301	18.211	32.654	0.1813	0.1011	222
62	酰噻磺隆 II	3.337	18.264	32.741	0.1827	0.1019	241
63	单噻磺酯 II	3.464	18.242	32.8	0.1899	0.1056	239
64	烟噻磺隆	3.627	18.189	33.096	0.1994	0.1096	201 240
65	醚磺隆 I	3.731	18.092	32.62	0.2062	0.1144	236
66	麦草畏	3.831	18.287	33.346	0.2095	0.1149	203
67	乙撑硫脲	3.51	18.217	32.751	0.1927	0.1072	232
68	噻唑锌	3.545	18.244	33.168	0.1943	0.1069	294
69	氟唑磺隆 II	3.698	18.094	32.607	0.2044	0.1134	235
70	噻吩磺隆	3.74	18.221	33.159	0.2053	0.1128	234
71	呋喃磺草酮 II	3.380	18.224	32.754	0.1855	0.1032	203 259

72	呋喃磺草酮 III	3.802	18.224	32.754	0.2086	0.1161	203 259
73	萘乙酸钠	3.852	18.169	32.464	0.2120	0.1187	219 282
74	喹啉铜	3.968	18.895	34.294	0.2100	0.1157	202
75	啶磺草胺 I	3.924	18.147	32.639	0.2162	0.1202	221 293
76	单嘧磺酯 III	3.929	18.242	32.8	0.2154	0.1198	239
77	灭草松	3.991	18.212	33.157	0.2191	0.1204	224 336
78	噁霉灵	4.019	18.298	33.439	0.2196	0.1202	206
79	醚磺隆 II	4.046	18.092	32.62	0.2236	0.1240	236
80	呋喃磺草酮 IIII	4.076	18.224	32.754	0.2237	0.1244	203 259
81	环磺酮 1	4.104	18.204	32.66	0.2254	0.1257	206 259
82	丙烯硫脲	4.115	18.14	32.739	0.2268	0.1257	232
83	敌枯双	4.154	18.338	33.097	0.2265	0.1255	258
84	螺螨酯杂质 II	4.161	18.274	32.905	0.2277	0.1265	254
85	乙酰甲胺磷	4.198	18.482	34.154	0.2271	0.1229	197
86	敌敌畏	4.328	18.147	32.803	0.2385	0.1319	267
87	啶磺草胺	4.408	18.151	32.644	0.2429	0.1350	221 292
88	啶磺草胺 II	4.409	18.147	32.639	0.2430	0.1351	221 293
89	苄嘧磺隆 I	4.474	18.209	33.124	0.2457	0.1351	266
90	代森锰锌 II	4.486	18.198	33.079	0.2465	0.1356	266
91	二甲四氯二甲胺盐	4.580	18.18	32.671	0.2519	0.1402	227 279
92	砒嘧磺隆	4.587	18.514	34.208	0.2478	0.1341	205 240
93	宝成（玉嘧磺隆）	4.64	18.45	34.008	0.2515	0.1364	241
94	环磺酮 2	4.643	18.204	32.66	0.2551	0.1422	206 259
95	啶嘧磺隆 I	4.687	18.116	32.689	0.2587	0.1434	242
96	螺螨酯杂质 II	4.721	18.274	32.905	0.2583	0.1435	254
97	啶磺草胺 III	4.745	18.147	32.639	0.2615	0.1454	221 292
98	2,4-滴二甲铵盐	4.768	18.135	32.607	0.2629	0.1462	225 284
99	环磺酮 III	4.862	18.204	32.66	0.2671	0.1489	206 259
100	2,4-滴二甲铵盐	4.822	18.163	32.647	0.2655	0.1477	230 284
101	氧乐果	4.882	18.471	34.092	0.2643	0.1432	202
102	2,4-D 钠	4.887	18.433	33.841	0.2651	0.1444	230 284
103	2,4-D 二甲胺	4.912	18.413	33.791	0.2668	0.1454	230 284
104	α -萘乙酸 I	5.55	18.511	34.249	0.2998	0.1620	223 282
105	呋虫胺	5.92	18.177	33.125	0.3257	0.1787	270
106	甲基磺隆钠盐	5.96	18.297	33.065	0.3257	0.1803	237
107	二甲四氯	6.084	18.271	33.406	0.3330	0.1821	227 279
108	2,4-滴酸	6.16	18.268	33.432	0.3372	0.1843	228 284
109	溴硝醇	6.444	18.2	32.596	0.3541	0.1977	203
110	吡蚜酮	7.325	18.148	32.817	0.4036	0.2232	297
111	灭蝇胺	7.384	18.894	34.3	0.3908	0.2153	206

112	氯吡嘧磺隆 I	7.399	18.221	32.808	0.4061	0.2255	245
113	2,6-二氟酰胺	7.623	18.453	33.905	0.4131	0.2248	265
114	烯啶虫胺	8.027	18.232	33.111	0.4403	0.2424	213 270 306
115	杀线威	8.147	18.43	33.959	0.4421	0.2399	203
116	羟烯腺嘌呤	8.240	18.284	32.81	0.4507	0.2511	205 269
117	噻吡嘧磺隆	8.269	18.222	32.702	0.4538	0.2529	204 242
118	环吡氟草酮	8.723	18.327	33.096	0.4760	0.2636	271
119	杀螟丹	10.053	18.365	33.634	0.5474	0.2989	210
120	久效磷	10.375	18.399	33.676	0.5639	0.3081	214
121	烯草酮锂盐 I	10.548	18.431	33.929	0.5723	0.3109	283
122	灭多威	10.739	18.587	34.198	0.5778	0.3140	233
123	氯吡嘧磺隆 II	11.961	18.221	32.808	0.6564	0.3646	244
124	棉隆	11.250	18.232	32.682	0.6170	0.3442	279
125	噻节因	11.713	18.362	33.556	0.6379	0.3491	202
126	烯草酮锂盐 II	11.832	18.431	33.929	0.6420	0.3487	283
127	氟吡磺隆	12.079	18.284	33.576	0.6606	0.3598	249
128	双氯磺草胺 I	12.164	18.189	32.556	0.6688	0.3736	250
129	甲基硫环磷	12.167	18.389	33.701	0.6616	0.3610	252
130	五氟磺草胺	12.215	18.397	33.684	0.6640	0.3626	230 282
131	赤霉素 GA4+A7	12.266	18.349	33.054	0.6685	0.3711	210
132	α -萘乙酸 II	12.490	18.511	34.249	0.6747	0.3647	223 282
133	三氮唑嘧啶酮	12.516	18.145	32.663	0.6898	0.3832	301
134	噻虫嗪	12.649	18.44	33.949	0.6860	0.3726	252
135	氟啶虫酰胺	12.628	18.34	33.501	0.6885	0.3769	268
136	双氯磺草胺 II	12.761	18.189	32.556	0.7016	0.3920	250
137	甲嘧磺隆	13.053	18.065	32.508	0.7226	0.4015	241
138	环氧虫啉	13.104	18.2	32.636	0.7200	0.4015	343
139	三氯吡氧乙酸 I	13.162	18.277	33.727	0.7201	0.3903	223 296
140	胺苯磺隆	13.428	18.436	33.852	0.7284	0.3967	226
141	啶嘧磺隆 II	13.439	18.116	32.689	0.7418	0.4111	224 261
142	苄嘧磺隆 II	13.468	18.207	33.124	0.7397	0.4066	226 261
143	乙氧磺隆 I	13.536	18.286	32.933	0.7402	0.4110	240
144	4, -4' 一联吡啶	13.592	18.146	32.661	0.7490	0.4162	239
145	噻霉酮	13.642	18.34	33.492	0.7438	0.4073	318
146	双氟磺草胺	13.676	18.42	33.77	0.7425	0.4050	245
147	乙氧磺隆 II	13.682	18.286	32.933	0.7482	0.4154	240
148	环黄酮	13.749	18.326	33.504	0.7502	0.4104	259
149	噻虫胺	13.819	18.209	33.017	0.7589	0.4185	267
150	甲基嘧啶磷 I	13.844	18.103	32.638	0.7647	0.4242	224 297
151	盐酸吗啉胍	13.9	18.471	34.125	0.7525	0.4073	237
152	甲酰胺基嘧磺隆	14.203	18.258	32.738	0.7779	0.4338	249

153	吡虫啉	14.224	18.268	33.260	0.7786	0.4277	270
154	氯酯磺草胺 I	14.229	18.316	33.051	0.7769	0.4305	255
155	三氟羧草醚 I	14.141	18.339	33.490	0.7711	0.4222	291
156	苯噻草酮	14.465	18.400	33.824	0.7861	0.4277	309
157	氯噻啉	14.901	18.174	32.559	0.8199	0.4577	251
158	乙氧磺隆 III	15.011	18.286	32.933	0.8209	0.4558	240
159	肟草酮 1	15.097	18.227	32.796	0.8283	0.4603	283
160	苯磺隆	15.105	18.344	33.489	0.8234	0.4510	255
161	3-甲基吡啶	15.171	18.213	32.758	0.8330	0.4631	263
162	三氟羧草醚 II	15.225	18.339	33.490	0.8302	0.4546	291
163	噻苯胺磺隆 I	15.401	18.257	32.815	0.8436	0.4693	235
164	氯酯磺草胺 II	15.353	18.316	33.051	0.8382	0.4645	255
165	啶虫脒	15.25	18.164	32.870	0.8396	0.4639	245
166	杀鼠醚	15.363	18.423	33.935	0.8339	0.4527	311
167	多菌灵	15.419	18.249	33.331	0.8449	0.4626	286
168	三氯吡氧乙酸 II	15.464	18.277	33.727	0.8461	0.4585	223 296
169	对硝基苯酚钾	15.49	18.051	32.458	0.8581	0.4772	
170	苯菌灵	15.495	18.335	33.516	0.8451	0.4623	240 286
171	氟磺胺草醚	15.514	18.323	33.462	0.8467	0.4636	290
172	抗倒酯	15.57	18.447	33.970	0.8440	0.4583	274
173	乐果	15.596	18.480	34.130	0.8439	0.4570	196
174	三氯啶磺隆钠	15.597	18.327	33.219	0.8510	0.4695	242
175	双草醚	15.685	18.323	33.528	0.8560	0.4678	244
176	苯噻磺草胺	15.698	18.223	32.815	0.8614	0.4784	270
177	氯鼠酮	15.81	18.210	32.636	0.8682	0.4844	222 285
178	乙蒜素	15.876	18.188	32.542	0.8729	0.4879	196
179	藜芦碱	15.904	18.113	32.682	0.8780	0.4866	215 306
180	氟吡呋喃酮	15.931	18.254	32.807	0.8727	0.4856	261
181	苄氨基嘌呤	16.145	18.137	32.611	0.8902	0.4951	269
182	霜脲氰	16.18	18.265	33.389	0.8858	0.4846	243
183	噻虫啉	16.245	18.125	32.779	0.8963	0.4956	242
184	噻菌灵	16.252	18.110	32.483	0.8974	0.5003	298
185	2,4-二硝基苯酚钾	16.326	18.031	32.373	0.9054	0.5043	241 343
186	三环唑	16.339	18.545	34.145	0.8810	0.4785	213
187	拌种灵	16.341	18.185	32.597	0.8986	0.5013	305
188	异戊烯基腺嘌呤	16.365	18.163	32.603	0.9010	0.5019	269
189	5-硝基邻苯甲氧苯酚钠	16.438	18.116	32.698	0.9074	0.5027	241 344
190	硫环磷	16.539	18.372	32.959	0.9002	0.5018	251
191	溴敌隆 A	16.723	18.357	33.599	0.9110	0.4977	245

192	复硝酚钠	16.785	18.407	33.801	0.9119	0.4966	242
193	吡啶丁酸	16.797	18.447	33.986	0.9106	0.4942	221 281
194	吡虫啉 I	16.858	18.317	33.093	0.9203	0.5094	272 345
195	2,2-联吡啶	16.967	18.237	32.821	0.9304	0.5170	234 281
196	氯噻磺隆	17.02	18.491	34.201	0.9204	0.4976	245
197	丙噻磺隆	17.059	18.125	32.541	0.9412	0.5242	233
198	磷胺	17.13	18.184	32.550	0.9420	0.5263	197
199	涕灭威	17.229	18.429	33.879	0.9349	0.5085	243
200	溴菌腈	17.24	18.072	32.520	0.9540	0.5301	196
201	氟胺磺隆	17.332	18.153	32.439	0.9548	0.5343	233
202	卡草胺	17.334	18.398	33.747	0.9422	0.5136	233
203	2,6-二氯苯胺	17.471	18.453	32.824	0.9468	0.5323	227 270
204	雷公藤甲素	17.489	18.211	32.642	0.9604	0.5358	217
205	氨唑草酮	17.494	18.190	32.569	0.9617	0.5371	218
206	吡噻磺隆	17.573	18.422	33.941	0.9539	0.5178	243
207	噁虫酮	17.584	18.195	32.805	0.9664	0.5360	277
208	甲基二磺隆	17.653	18.406	33.737	0.9591	0.5233	240
209	邻硝基苯酚钾	17.655	18.083	32.575	0.9763	0.5420	276
210	丁噻隆	17.679	18.413	33.115	0.9601	0.5339	254
211	环噻酮	17.707	18.215	33.129	0.9721	0.5345	246
212	噻苯隆	17.758	18.165	32.955	0.9776	0.5389	229 288
213	氰草津	17.79	18.306	33.414	0.9718	0.5324	220
214	噻苯胺磺隆 II	17.809	18.257	32.815	0.9755	0.5427	241
215	速灭威	17.823	18.367	33.526	0.9704	0.5316	198 262
216	西玛津	17.790	17.998	32.228	0.9884	0.5520	218
217	除草定	17.813	18.216	32.862	0.9779	0.5421	276
218	噁霜灵	17.916	18.499	34.114	0.9685	0.5252	197
219	灭蚜威	17.97	18.466	34.099	0.9731	0.5270	265
220	三氯苯嘧啶	18.117	18.031	32.842	1.0048	0.5516	204 232
221	氰烯菌酯	18.149	18.136	32.847	1.0007	0.5525	289
222	甲磺草胺	18.231	18.140	32.480	1.0050	0.5613	263
223	赛克	18.275	18.505	33.698	0.9876	0.5423	265
224	甲基硫菌灵	18.309	18.153	32.816	1.0086	0.5579	275
225	噻草酮	18.322	18.309	33.081	1.0007	0.5539	211 294

226	溴敌隆 B	18.371	18.357	33.599	1.0008	0.5468	261
227	甲基吡啶磷	18.426	18.485	34.098	0.9968	0.5404	230 294
228	叶枯唑	18.432	18.160	32.544	1.0150	0.5664	321
229	对氯苯酚	18.547	18.096	32.469	1.0249	0.5712	224 282
230	恶虫威	18.554	18.345	33.044	1.0114	0.5615	277
231	残杀威	18.684	18.448	34.023	1.0128	0.5492	271
232	硫双威	18.723	18.227	33.197	1.0272	0.5640	234
233	2,6-二甲基苯胺	18.736	18.170	32.707	1.0312	0.5728	231 282
234	福美肿 II	18.858	18.062	32.528	1.0441	0.5797	196
235	伯酰胺	18.888	18.107	32.648	1.0431	0.5785	199
236	呋喃酚	18.926	18.100	32.586	1.0456	0.5808	279
237	拉维因	18.94	18.470	34.050	1.0254	0.5562	234
238	克百威	18.954	18.607	34.203	1.0186	0.5542	280
239	烯丙苯噻唑	18.971	18.317	33.252	1.0357	0.5705	199 272
240	乙嘧酯	18.990	18.148	32.789	1.0464	0.5792	222 296
241	哌虫啉 II	19.016	18.317	33.093	1.0382	0.5746	274 352
242	乙嘧酚	19.06	18.158	32.971	1.0497	0.5781	222 296
243	烟碱	19.061	18.354	33.574	1.0385	0.5677	261
244	驱蚊酯	19.064	18.343	33.166	1.0393	0.5748	197
245	2-乙基-6-甲基 -2-氯乙酰苯胺	19.075	18.318	33.066	1.0413	0.5769	199
246	印楝素 I	19.165	18.061	32.496	1.0611	0.5898	197
247	菱锈灵	19.213	18.051	32.475	1.0644	0.5916	251 293
248	福美双	19.346	18.408	33.702	1.0510	0.5740	280
249	双唑草酮	19.347	18.275	32.961	1.0587	0.5870	240
250	甲萘威	19.357	18.442	33.989	1.0496	0.5695	212 280
251	噻唑菌胺	19.394	18.166	33.211	1.0676	0.5840	309
252	粉唑醇	19.518	18.215	32.696	1.0715	0.5970	262
253	三十烷醇	19.535	18.376	33.283	1.0631	0.5869	197
254	绿麦隆	19.545	18.252	32.890	1.0708	0.5943	243
255	印楝素 II	19.633	18.061	32.496	1.0870	0.6042	196
256	溴氰虫酰胺	19.642	18.289	33.368	1.0740	0.5886	270
257	抑食肼	19.722	18.262	32.843	1.0799	0.6005	225
258	呋苯硫脲	19.762	18.382	33.718	1.0751	0.5861	309
259	氟鼠灵	19.906	18.218	32.589	1.0927	0.6108	312
260	莠去津	19.956	18.155	32.813	1.0992	0.6082	221
261	抗蚜威	19.982	18.303	33.430	1.0917	0.5977	245

262	氟吗啉 I	19.997	18.182	32.674	1.0998	0.6120	237
263	西草净	20.011	18.264	33.516	1.0957	0.5971	221
264	异丙隆	20.040	18.152	32.642	1.1040	0.6139	239
265	氯吡脞	20.046	18.387	33.697	1.0902	0.5949	264
266	菌核净	20.061	18.434	33.861	1.0883	0.5925	198
267	三唑锡	20.117	18.922	34.377	1.0632	0.5852	200
268	丁香酚	20.14	18.214	32.728	1.1057	0.6154	281
269	敌草隆	20.236	18.172	33.023	1.1136	0.6128	250
270	1,2-二溴乙烷	20.248	18.289	32.868	1.1071	0.6160	197
271	双唑草腈	20.302	18.228	32.712	1.1138	0.6206	234
272	避蚊胺	20.362	18.185	32.618	1.1197	0.6243	199
273	氟吗啉 II	20.382	18.182	32.674	1.1210	0.6238	237
274	丁子香酚	20.444	18.473	34.026	1.1067	0.6008	281
275	异丙威	20.486	18.486	34.118	1.1082	0.6004	197
276	甲霜灵	20.500	18.178	33.063	1.1277	0.6200	198
277	吡唑草胺	20.529	18.224	32.672	1.1265	0.6283	198/265
278	噻唑膦	20.588	18.888	34.310	1.0900	0.6001	217
279	混灭威	20.68	18.328	33.106	1.1283	0.6247	198
280	2-甲基-6-乙基苯胺	20.754	18.293	33.008	1.1345	0.6288	232 283
281	吡草胺	20.792	18.391	33.739	1.1306	0.6163	210
282	瑞毒霉	20.805	18.451	33.997	1.1276	0.6120	266
283	二溴磷	21.039	18.471	34.055	1.1390	0.6178	196
284	砒吡草唑	21.113	18.214	32.732	1.1592	0.6450	224
285	甜菜安	21.129	18.259	32.777	1.1572	0.6446	234
286	氟烯线砒	21.218	18.288	33.074	1.1602	0.6415	273
287	甜菜宁	21.224	18.144	32.550	1.1698	0.6520	200 235
288	氯虫苯甲酰胺	21.264	18.191	33.022	1.1689	0.6439	230
289	哒优麦	21.379	18.423	33.876	1.1605	0.6311	272
290	双丙环虫酯	21.405	18.227	32.654	1.1744	0.6555	230 319
291	氟啶草酮	21.505	18.225	32.612	1.1800	0.6594	233 307
292	精甲霜灵	21.616	18.824	34.143	1.1483	0.6331	200 266
293	丙炔氟草胺	21.7	18.273	33.395	1.1875	0.6498	213 288
294	敌稗	21.733	18.106	32.184	1.2003	0.6753	203 250
295	异噁草松	21.767	18.355	33.591	1.1859	0.6480	210
296	异噁唑草酮	21.862	18.413	33.780	1.1873	0.6472	270
297	2,4,6-三氯苯酚	21.9	18.398	33.691	1.1903	0.6500	249
298	烯酰吗啉	21.944	18.239	33.261	1.2031	0.6598	245
299	z-噻草醚	21.96	18.260	32.785	1.2026	0.6698	250 280
300	呋草酮	21.969	18.314	33.209	1.1996	0.6615	276
301	丙硫多菌灵	22.024	18.720	33.583	1.1765	0.6558	216 295

302	2-氯-4-溴苯酚	22.045	18.218	32.674	1.2101	0.6747	287
303	乙虫腓	22.157	18.164	32.508	1.2198	0.6816	279
304	解草酮	22.297	18.180	32.670	1.2265	0.6825	257 290
305	仲丁威	22.57	18.554	34.149	1.2164	0.6609	196
306	咯菌腓	22.346	18.194	33.075	1.2282	0.6756	265
307	杀扑磷	22.354	18.438	33.974	1.2124	0.6580	197
308	4-溴-2-氯苯酚	22.396	18.351	33.640	1.2204	0.6658	287
309	莠灭净	22.398	18.310	33.473	1.2233	0.6691	222
310	苯噻菌胺	22.408	18.128	32.725	1.2361	0.6847	218
311	乙霉威	22.439	18.348	33.513	1.2230	0.6696	243
312	特丁津	22.473	18.053	32.439	1.2448	0.6928	220
313	嘧菌酯	22.5	18.269	33.260	1.2316	0.6765	198
314	杀螺胺乙醇胺盐	22.523	18.130	32.741	1.2423	0.6879	335
315	克菌丹	22.555	18.374	33.722	1.2275	0.6689	197
316	氟氯吡啶酯	22.767	18.184	32.808	1.2520	0.6939	250
317	多效唑	22.869	18.512	34.246	1.2354	0.6678	219
318	利谷隆	22.901	18.341	33.467	1.2486	0.6843	249
319	烯酰吗啉	22.935	18.239	33.261	1.2575	0.6895	245
320	缬菌胺 I	23.004	18.290	33.047	1.2577	0.6961	220
321	杀鼠灵(溴鼠灵) I	23.009	18.419	33.863	1.2492	0.6795	264
322	杀螺胺	23.030	18.234	32.769	1.2630	0.7028	230 336
323	2,6-二乙基苯胺	23.104	18.311	32.814	1.2618	0.7041	232 284
324	肟草酮 II	23.175	18.227	32.796	1.2715	0.7066	283
325	啶酰菌胺	23.225	18.152	32.806	1.2795	0.7079	197 240
326	烟酰胺	23.270	18.232	32.745	1.2763	0.7106	200 230
327	双炔酰菌胺	23.412	18.490	34.146	1.2662	0.6856	277
328	环酯草醚	23.415	18.452	33.989	1.2690	0.6889	236
329	环唑醇 1	23.44	18.300	32.930	1.2809	0.7118	225
330	草除灵	23.491	18.430	33.961	1.2746	0.6917	215
331	氟吡菌胺	23.491	18.172	32.873	1.2927	0.7146	270
332	苄草隆	23.506	18.281	33.139	1.2858	0.7093	198
333	乙氧呋草胺	23.351	18.180	32.653	1.2844	0.7151	225 279
334	啶菌噁唑 I	23.541	18.169	32.594	1.2957	0.7222	261
335	2,2':6',2"- 三联吡啶	23.552	18.312	32.948	1.2862	0.7148	232 282
336	缬菌胺 II	23.6	18.290	33.047	1.2903	0.7141	220
337	嘧霉胺	23.686	18.506	34.229	1.2799	0.6920	271
338	炔苯酰草胺	23.697	18.089	32.588	1.3100	0.7272	199
339	缬霉威	23.707	18.190	32.613	1.3033	0.7269	264
340	E-嘧草醚	23.731	18.305	32.948	1.2964	0.7203	245

341	氟唑环菌胺 I	23.759	18.151	32.422	1.3090	0.7328	257
342	三唑醇	23.766	18.430	33.982	1.2895	0.6994	222
343	腈菌唑	23.812	18.122	32.748	1.3140	0.7271	219
344	异噻菌胺	23.836	18.230	32.927	1.3075	0.7239	280
345	二氰蒽醌	23.905	18.156	32.829	1.3166	0.7282	233
346	氟噻唑吡乙酮	24.016	18.318	33.146	1.3111	0.7246	258
347	灭菌唑	24.022	18.217	32.760	1.3187	0.7333	263
348	三唑酮	24.062	18.218	33.142	1.3208	0.7260	220 275
349	香芹酚	24.142	18.478	33.979	1.3065	0.7105	275
350	苯噻酰草胺	24.133	18.112	32.675	1.3324	0.7386	200
351	氯苯胺灵	24.134	18.123	32.528	1.3317	0.7419	238
352	联苯肼菊	24.152	18.084	32.583	1.3355	0.7412	230 265
353	氟酰胺	24.164	18.229	32.917	1.3256	0.7341	245
354	环唑醇 II	24.169	18.300	32.930	1.3207	0.7340	225
355	杀鼠灵 (溴鼠灵) II	24.231	18.419	33.863	1.3155	0.7156	264
356	联苯肼酯	24.336	18.153	32.819	1.3406	0.7415	230
357	戊炔草胺	24.43	18.399	33.745	1.3278	0.7240	210
358	灭菌丹	24.44	18.201	32.570	1.3428	0.7504	219
359	甲氧虫酰肼	24.443	18.372	33.685	1.3304	0.7256	197 278
360	氟吡菌酰胺	24.501	18.287	33.302	1.3398	0.7357	270
361	氟唑唑	24.577	18.247	32.799	1.3469	0.7493	273
362	四氟醚唑	24.651	18.191	33.075	1.3551	0.7453	220
363	啶菌噁唑 II	24.702	18.169	32.594	1.3596	0.7579	261
364	SP-2	24.738	18.502	34.127	1.3370	0.7249	210
365	氟环唑	24.753	18.166	32.913	1.3626	0.7521	198
366	甲基嘧啶磷 II	24.838	18.103	32.638	1.3720	0.7610	248 302
367	禾草敌	24.864	18.142	32.642	1.3705	0.7617	197
368	环酰菌胺	25.040	18.170	32.862	1.3781	0.7620	240 288
369	嘧菌胺	25.160	18.142	32.618	1.3868	0.7714	273
370	氟嘧菌酯	25.285	18.217	32.631	1.3880	0.7749	251
371	氟唑环菌胺 II	25.305	18.151	32.422	1.3941	0.7805	257
372	环虫酰肼	25.341	18.299	33.030	1.3848	0.7672	247
373	杀虫脒	25.397	18.457	34.062	1.3760	0.7456	253
374	苯线磷	25.513	18.102	32.615	1.4094	0.7822	251
375	双环磺草酮	25.534	18.394	33.370	1.3882	0.7652	324
376	氟醚菌酰胺	25.536	18.240	32.768	1.4000	0.7793	225 275
377	腐霉利	25.559	18.129	32.726	1.4098	0.7810	198
378	四氯苯酞	25.571	18.013	32.251	1.4196	0.7929	216 248 308
379	丙硫菌唑	25.654	18.058	32.457	1.4206	0.7904	253
380	特丁净	25.678	18.186	32.525	1.4120	0.7895	223

381	三唑磷	25.74	18.391	33.667	1.3996	0.7645	241
382	杀螟硫磷	25.759	18.431	33.897	1.3976	0.7599	270
383	氨磺乐灵	25.812	18.230	32.658	1.4159	0.7904	285
384	扑草净	25.829	18.393	33.758	1.4043	0.7651	221
385	百菌清	25.863	18.510	34.153	1.3972	0.7573	232
386	马拉硫磷	25.928	18.407	33.897	1.4086	0.7649	200
387	炔咪菊酯 I	25.795	18.495	34.158	1.3947	0.7552	197
388	氟噻草胺	25.998	18.186	32.554	1.4296	0.7986	197
389	稻瘟灵	26.098	18.574	34.303	1.4051	0.7608	306
390	氯唑磷	26.105	18.160	32.506	1.4375	0.8031	197
391	二氯喹啉草酮	26.236	18.226	32.663	1.4395	0.8032	226
392	敌草胺	26.248	18.466	34.030	1.4214	0.7713	290
393	四氯虫酰胺	26.296	18.573	34.199	1.4158	0.7689	245
394	炔咪菊酯 II	26.322	18.495	34.158	1.4232	0.7706	197
395	烯效唑	26.399	18.576	34.203	1.4211	0.7718	254
396	灭线磷	26.584	18.510	34.239	1.4362	0.7764	197 225
397	呋喃虫酰胺	26.445	18.321	33.062	1.4434	0.7999	289
398	腈苯唑	26.500	18.294	33.004	1.4486	0.8029	225
399	蛇床子素	26.543	18.052	32.486	1.4704	0.8171	321
400	噻呋酰胺	26.666	18.260	33.219	1.4604	0.8027	198
401	鱼藤酮	26.675	18.217	33.175	1.4643	0.8041	294
402	硫丹醇	26.680	18.092	32.548	1.4747	0.8197	210
403	氟硅唑	26.801	18.514	34.230	1.4476	0.7830	197
404	苯氧威	26.684	18.310	33.107	1.4573	0.8060	292
405	异丙甲草胺	26.743	18.113	32.704	1.4765	0.8177	198
406	氯吡磷	26.762	18.380	33.647	1.4560	0.7954	197
407	精异丙甲草胺	26.837	18.212	32.784	1.4736	0.8186	220
408	单甲脒	26.895	18.343	33.566	1.4662	0.8013	196
409	乙草胺	26.938	18.259	33.361	1.4753	0.8075	198
410	螺虫乙酯	26.939	18.906	34.335	1.4249	0.7846	220
411	氰霜唑	26.902	18.219	33.159	1.4766	0.8113	280
412	八氯二丙醚	26.921	18.465	34.015	1.4579	0.7914	196
413	氟虫腈	27.001	18.131	32.795	1.4892	0.8233	279
414	硅噻菌胺	27.021	18.073	32.537	1.4951	0.8305	245
415	除虫脲	27.059	18.515	34.121	1.4615	0.7930	258
416	氯氟氰虫酰胺	27.069	18.430	33.042	1.4687	0.8192	250
417	异稻瘟净	27.094	18.330	33.196	1.4781	0.8162	198
418	灭幼脲	27.137	18.136	32.823	1.4963	0.8268	256
419	氟螨嗪	27.145	18.143	32.542	1.4962	0.8342	268
420	虫酰胺	27.276	18.314	33.474	1.4894	0.8148	234
421	乙烯菌核利	27.277	18.356	33.073	1.4860	0.8248	201

422	唑草酮	27.346	18.098	32.672	1.5110	0.8370	244
423	氟唑菌苯胺	27.352	18.357	33.131	1.4900	0.8256	199
424	稻瘟酰胺 I	27.372	18.220	32.753	1.5023	0.8357	230 283
425	戊菌唑	27.412	18.140	32.792	1.5111	0.8359	220
426	氟苯虫酰胺	27.453	18.305	33.069	1.4998	0.8302	197
427	甲草胺	27.473	18.487	34.110	1.4861	0.8054	197
428	啶硫磷 I	27.572	18.562	34.338	1.4854	0.8030	241
429	稻瘟酰胺 II	27.583	18.220	32.753	1.5139	0.8422	230 283
430	氟噻甲草酯	27.605	18.217	32.713	1.5153	0.8439	198
431	拿扑净	27.631	18.357	33.587	1.5052	0.8227	282
432	乙嘧酚磺酸酯	27.646	18.189	33.081	1.5199	0.8357	197 240 303
433	抑霉唑	27.709	18.015	32.290	1.5381	0.8581	198
434	苯硫威	27.735	18.437	33.986	1.5043	0.8161	271
435	戊唑醇	27.736	18.526	34.253	1.4971	0.8097	220
436	氟虫双酰胺	27.78	18.377	33.763	1.5117	0.8228	225
437	吡草醚	27.789	18.132	32.304	1.5326	0.8602	243 291
438	吡噻菌胺	27.818	18.249	32.782	1.5244	0.8486	225
439	氯氟醚菌唑	27.832	18.356	33.690	1.5162	0.8261	229
440	叶菌唑	27.894	18.037	32.276	1.5465	0.8642	198 219
441	大蒜素 I	27.899	18.281	32.962	1.5261	0.8464	197
442	稻丰散	27.91	18.191	32.614	1.5343	0.8558	225
443	内吸磷	28.036	18.389	32.996	1.5246	0.8497	197
444	醚菌酯	28.084	18.535	34.133	1.5152	0.8228	250
445	SP-1	28.135	18.200	32.595	1.5459	0.8632	275
446	苯并烯氟菌唑	28.161	18.315	33.053	1.5376	0.8520	255
447	丁吡吗啉	28.229	18.276	32.854	1.5446	0.8592	243
448	杀铃脲	28.243	18.070	32.511	1.5630	0.8687	249
449	1,4-二氯苯	28.250	18.192	32.921	1.5529	0.8581	221
450	炔草酯	28.301	18.441	33.963	1.5347	0.8333	224 279
451	己唑醇	28.339	18.250	33.190	1.5528	0.8538	220
452	对-二氯苯	28.433	18.356	33.613	1.5490	0.8459	222
453	唑菌酯	28.461	18.218	32.606	1.5622	0.8729	253
454	补骨脂乙素	28.464	18.234	32.709	1.5610	0.8702	198 369
455	精苯霜灵	28.482	18.227	32.685	1.5626	0.8714	198 264
456	莎稗磷	28.531	18.129	32.719	1.5738	0.8720	198
457	氟啶胺	28.686	18.392	33.567	1.5597	0.8546	259
458	啶硫磷 II	28.766	18.562	34.338	1.5497	0.8377	237
459	唑啉菌胺	28.772	18.198	32.578	1.5811	0.8832	294
460	苯酰锰锌	28.807	18.099	32.602	1.5916	0.8836	245
461	丁虫脩	28.828	18.209	32.590	1.5832	0.8846	287
462	啶菌环胺	28.874	18.470	34.070	1.5633	0.8475	271

463	异丙草胺	28.968	18.244	33.302	1.5878	0.8699	198
464	丙环唑 I	28.802	18.459	34.007	1.5603	0.8469	197
465	丙环唑 II	29.117	18.459	34.007	1.5774	0.8562	197
466	噁唑菌酮	29.051	18.447	33.875	1.5748	0.8576	228
467	甲基异柳磷	29.141	18.454	33.963	1.5791	0.8580	225 277
468	咪鲜胺	29.159	18.247	33.290	1.5980	0.8759	198
469	丙炔噁草酮	29.204	18.207	32.746	1.6040	0.8918	288
470	辛硫磷	29.606	18.253	33.259	1.6220	0.8902	283
471	吡唑醚菌酯	29.322	18.168	32.947	1.6139	0.8900	275
472	唑啉草酯	29.417	18.306	33.341	1.6070	0.8823	259
473	苯酰菌胺	29.449	18.390	33.697	1.6014	0.8739	200
474	蝇毒磷	29.476	18.414	33.844	1.6007	0.8709	314
475	环氟菌胺	29.584	18.209	32.662	1.6247	0.9058	240
476	解草唑	29.603	18.152	32.772	1.6308	0.9033	308
477	辛硫磷	29.62	18.277	33.279	1.6206	0.8901	283
478	毒氟磷	29.655	18.220	32.763	1.6276	0.9051	225 270
479	烯唑醇	29.735	18.435	33.871	1.6130	0.8779	250
480	地虫硫磷	29.743	18.276	33.562	1.6274	0.8862	238
481	戊菌隆	29.768	18.115	32.588	1.6433	0.9135	239
482	二嗪磷 I	29.8	18.447	33.948	1.6154	0.8778	247
483	二嗪农	29.833	18.464	34.022	1.6157	0.8769	247
484	禾草丹	29.839	18.091	32.419	1.6494	0.9204	225
485	苯醚甲环唑	29.988	18.263	33.410	1.6420	0.8976	230
486	四螨嗪	30.132	18.431	33.929	1.6349	0.8881	271
487	种菌唑	30.250	18.139	32.548	1.6677	0.9294	219
488	吡唑解草酯	30.264	18.418	33.750	1.6432	0.8967	308
489	氯丙炔菊酯	30.31	18.373	33.591	1.6497	0.9023	221
490	甲羧除草醚	30.387	18.233	32.705	1.6666	0.9291	292
491	氯氟吡啶酯	30.407	18.431	33.945	1.6498	0.8958	244
492	溴虫氟苯双酰胺	30.526	18.330	33.104	1.6654	0.9221	
493	啞螨酯	30.551	18.221	32.795	1.6767	0.9316	250
494	苯醚菊酯	30.581	18.325	33.107	1.6688	0.9237	198
495	甲基啞啶磷 III	30.592	18.103	32.638	1.6899	0.9373	247 297
496	甲基立枯磷	30.731	18.420	33.907	1.6683	0.9063	197 282
497	甲拌磷	30.777	18.425	33.910	1.6704	0.9076	197
498	苯菌酮	30.846	18.205	32.688	1.6944	0.9436	198 285
499	异菌脲	30.849	18.183	33.015	1.6966	0.9344	249
500	吡唑萘菌胺	30.907	18.413	33.765	1.6785	0.9154	250
501	氟铃脲	30.959	18.440	33.962	1.6789	0.9116	254
502	氟酰脲	30.961	18.201	32.676	1.7011	0.9475	198 252
503	氟菌唑	31.028	18.140	32.768	1.7105	0.9469	236

504	茚虫威	31.029	18.317	33.447	1.6940	0.9277	310
505	烯肟菌胺	31.060	18.097	32.366	1.7163	0.9596	274
506	吡氟酰草胺	31.119	18.265	33.329	1.7038	0.9337	283
507	肟菌酯	31.123	18.284	33.294	1.7022	0.9348	249
508	硫线磷	31.227	18.274	33.530	1.7088	0.9313	197
509	甲基毒死蜱	31.345	18.429	33.883	1.7009	0.9251	228 289
510	莠去醇	31.421	18.145	32.415	1.7317	0.9693	210
511	硫丹醚	31.524	18.078	32.559	1.7438	0.9682	220
512	氟硫草定	31.59	18.257	32.819	1.7303	0.9626	250
513	丙酯草醚	31.612	18.160	32.515	1.7407	0.9722	303
514	啶草丹	31.720	18.269	32.841	1.7363	0.9659	198
515	炔丙菊酯	31.787	18.405	33.800	1.7271	0.9404	222
516	氰氟草酯	31.795	18.210	33.133	1.7460	0.9596	234 248
517	大蒜素 II	31.823	18.281	32.962	1.7408	0.9654	197
518	喹禾糖酯	31.847	18.248	32.705	1.7452	0.9738	235
519	七氟甲醚	32.007	18.026	32.391	1.7756	0.9881	273
520	二嗪磷 II	32.026	18.447	33.948	1.7361	0.9434	287
521	噁唑酰草胺	32.030	18.222	32.773	1.7578	0.9773	237 277
522	精噁唑禾草灵	32.154	18.135	32.790	1.7730	0.9806	238 278
523	乙羧氟草醚	32.447	18.353	33.727	1.7679	0.9620	291
524	2,4-D 丁酯	32.639	18.363	33.581	1.7774	0.9719	
525	除草醚	32.748	18.167	32.527	1.8026	1.0068	296
526	虫螨腈	32.807	18.143	32.628	1.8082	1.0055	260
527	环戊噁草酮	33.031	18.217	32.708	1.8132	1.0099	248 287
528	吡螨胺	33.095	18.198	32.715	1.8186	1.0116	225
529	烯肟菌酯	33.316	18.081	32.291	1.8426	1.0317	292
530	丙草胺	33.409	18.379	33.630	1.8178	0.9934	197
531	硝虫硫磷	33.43	18.246	32.861	1.8322	1.0173	220
532	丙硫克百威	33.185	18.124	32.729	1.8310	1.0139	280
533	亚胺唑	33.61	18.183	32.625	1.8484	1.0302	250
534	氰氟虫腙	33.631	18.226	32.760	1.8452	1.0266	233 285
535	酰胺唑	33.702	18.130	32.648	1.8589	1.0323	250
536	精吡氟禾草灵	33.734	18.155	32.484	1.8581	1.0385	270
537	丁氟螨酯	33.764	18.166	32.905	1.8586	1.0261	198
538	唑虫酰胺	33.862	18.157	32.869	1.8650	1.0302	232
539	氟吡草胺	33.88	18.242	33.019	1.8573	1.0261	290
540	乙氧氟草醚	33.969	18.289	32.957	1.8573	1.0307	275
541	右旋胺菊酯	34.045	18.244	32.796	1.8661	1.0381	220

542	丙溴磷	34.094	18.448	34.004	1.8481	1.0026	225
543	虱螨脲	34.109	18.147	32.825	1.8796	1.0391	256
544	解草啶	34.186	18.172	32.537	1.8812	1.0507	268
545	禾草克	34.229	18.495	34.222	1.8507	1.0002	235
546	丁香菌酯	34.280	18.148	32.579	1.8889	1.0522	321
547	增效磷	34.295	18.110	32.406	1.8937	1.0583	289
548	噁草酸	34.306	18.309	33.287	1.8737	1.0306	234
549	乳氟禾草灵	34.337	18.229	32.806	1.8836	1.0467	290
550	噁嗪草酮	34.391	18.370	33.710	1.8721	1.0202	225
551	高效氟吡甲禾灵	34.397	18.917	32.858	1.8183	1.0468	222 274
552	甲维盐	34.412	18.163	32.844	1.8946	1.0477	197
553	甲萘灵	34.452	18.219	32.724	1.8910	1.0528	217 288
554	胺菊酯	34.75	18.419	33.756	1.8866	1.0294	200
555	解毒啉（解草酯）	34.760	18.286	32.846	1.9009	1.0583	242
556	精啉禾灵	34.896	18.817	34.124	1.8545	1.0226	235 335
557	富右旋烯丙菊酯	34.983	18.227	32.762	1.9193	1.0678	223
558	啉啶脲草醚	35.005	18.409	33.763	1.9015	1.0368	245
559	烯丙菊酯	35.036	18.267	32.869	1.9180	1.0659	224
560	双硫磷	35.048	18.474	34.069	1.8972	1.0287	252
561	特丁硫磷	35.129	18.515	33.848	1.8973	1.0378	198
562	吡丙醚	35.164	18.213	33.088	1.9307	1.0627	271
563	增效醚	35.289	18.436	33.861	1.9141	1.0422	237 289
564	异丙酯草醚	35.313	18.228	32.740	1.9373	1.0786	225 308
565	溴螨酯	35.316	18.268	32.831	1.9332	1.0757	226
566	丙烯菊酯	35.434	18.397	33.556	1.9261	1.0560	223
567	氟节胺	35.493	18.292	32.728	1.9404	1.0845	275
568	大蒜素 III	35.575	18.281	32.962	1.9460	1.0793	198
569	ES-生物烯丙菊酯	35.624	18.456	33.952	1.9302	1.0492	223
570	右旋反式烯丙菊酯	35.658	18.454	34.018	1.9323	1.0482	223
571	噁草酮	35.684	18.512	34.149	1.9276	1.0450	225
572	丁草胺	35.712	18.352	33.586	1.9459	1.0633	195
573	毒死蜱	35.722	18.211	33.136	1.9616	1.0780	289
574	噻螨酮	35.864	18.242	33.146	1.9660	1.0820	224
575	噻嗪酮	35.868	18.885	34.295	1.8993	1.0459	244
576	阿维菌素 B2a	36.112	18.168	32.860	1.9877	1.0990	244
577	四氟苯菊酯	36.243	18.447	33.922	1.9647	1.0684	273
578	氟乐灵	36.248	18.475	34.168	1.9620	1.0609	274

579	二甲戊灵	36.255	18.405	33.800	1.9698	1.0726	239
580	氟虫脲	36.265	18.428	33.892	1.9679	1.0700	253
581	氟草烟酯	36.508	18.219	32.767	2.0038	1.1142	198
582	螺甲螨酯	36.536	17.942	31.979	2.0363	1.1425	200
583	大黄素甲醚	36.551	18.265	32.749	2.0011	1.1161	221 266 286
584	乙螨唑	36.605	18.220	33.136	2.0091	1.1047	199 272
585	氯氟醚菊酯	36.657	18.382	33.750	1.9942	1.0861	220 272
586	四氟醚菊酯	36.68	18.444	33.885	1.9887	1.0825	268
587	丁醚脲	36.703	18.064	32.308	2.0318	1.1360	251
588	硫丹 I	36.706	18.565	34.128	1.9772	1.0755	
589	五氯硝基苯	36.724	18.337	33.521	2.0027	1.0956	209
590	氟氯氰菊酯 I	36.741	18.193	32.564	2.0195	1.1283	268
591	炔螨特	36.821	18.401	33.784	2.0010	1.0899	221
592	三氯杀螨醇	36.962	18.444	33.963	2.0040	1.0883	222
593	氟氯氰菊酯 II	36.964	18.193	32.564	2.0318	1.1351	268
594	仲丁灵	37.061	18.487	34.106	2.0047	1.0866	235
595	唑螨酯	37.134	18.220	33.143	2.0381	1.1204	231
596	氯氟氰菊酯	37.169	18.179	32.555	2.0446	1.1417	199
597	氟氯氰菊酯 III	37.169	18.193	32.564	2.0430	1.1414	268
598	氯氟吡氧乙酸异辛酯	37.311	18.932	34.437	1.9708	1.0835	230
599	右旋烯炔菊酯 I	37.331	18.186	32.585	2.0527	1.1456	277
600	高效反式氯氰菊酯	37.34	18.190	32.817	2.0528	1.1378	277
601	小檗碱	37.347	18.082	32.554	2.0654	1.1472	265 348
602	高效氟氯氰菊酯 I	37.348	18.450	33.975	2.0243	1.0993	268
603	氟硅菊酯(硅醚菊酯)	37.126	18.233	32.733	2.0362	1.1342	198 276
604	精高效氯氟氰菊酯	37.469	18.440	32.910	2.0319	1.1385	199 277
605	氟啶脲	37.47	18.464	34.002	2.0294	1.1020	257
606	高效氯氰菊酯 I	37.474	18.198	33.136	2.0592	1.1309	277
607	zeta-氯氰菊酯 I	37.493	18.329	33.061	2.0456	1.1341	277
608	甲氰菊酯	37.523	18.454	33.865	2.0333	1.1080	277
609	高效氯氟氰菊酯	37.568	18.236	33.350	2.0601	1.1265	277
610	唑螨氰	37.624	18.310	33.107	2.0548	1.1364	292
611	顺式氯氰菊酯 I	37.638	18.187	32.597	2.0695	1.1546	277
612	高效氟氯氰菊酯 II	37.674	18.450	33.975	2.0420	1.1089	268
613	六氯苯	37.8	18.393	33.702	2.0551	1.1216	210

614	氯烯炔菊酯	37.8	18.342	33.482	2.0608	1.1290	198
615	四氟甲醚菊酯	37.882	18.426	33.822	2.0559	1.1200	273
616	顺式氯氰菊酯 II	37.893	18.187	32.597	2.0835	1.1625	277
617	zeta-氯氰菊酯 II	37.903	18.329	33.061	2.0679	1.1465	277
618	高效氯氰菊酯 II	37.919	18.198	33.136	2.0837	1.1443	277
619	苯丁锡	37.982	18.393	33.702	2.0650	1.1270	210
620	氯氰菊酯 I	38.054	18.414	33.809	2.0666	1.1256	277
621	氯氰菊酯 II	38.335	18.414	33.809	2.0818	1.1339	277
622	氯氰菊酯 III	38.631	18.414	33.809	2.0979	1.1426	277
623	硫丹 II	38.15	18.565	34.128	2.0549	1.1179	197
624	zeta-氯氰菊酯 III	38.165	18.329	33.061	2.0822	1.1544	277
625	啉螨醚	38.172	18.192	32.517	2.0983	1.1739	263 298
626	右旋烯炔菊酯 II	38.217	18.186	32.585	2.1015	1.1728	277
627	氟丙菊酯	38.232	18.306	33.072	2.0885	1.1560	230
628	S-氰戊菊酯	38.250	18.185	32.560	2.1034	1.1748	276
629	乙唑螨腈	38.259	18.265	32.839	2.0947	1.1650	225 300
630	螺螨酯	38.268	18.188	33.068	2.1040	1.1573	245
631	双甲醚	38.296	18.061	32.502	2.1204	1.1783	288
632	苯氰菊酯 I	38.37	18.301	33.126	2.0966	1.1583	277
633	桉油精	38.434	18.213	32.606	2.1103	1.1787	266
634	哒螨灵	38.535	18.135	32.752	2.1249	1.1766	295
635	大蒜素 IIII	38.571	18.281	32.962	2.1099	1.1702	198
636	硝苯菌酯	38.671	18.316	32.976	2.1113	1.1727	243
637	溴氰菊酯	38.672	18.415	33.705	2.1000	1.1474	198
638	右旋苯氰菊酯 I	38.606	18.328	33.543	2.1064	1.1509	277
639	右旋苯氰菊酯 II	39.313	18.328	33.543	2.1450	1.1720	277
640	右旋苯醚氰菊酯 I	38.728	18.421	33.756	2.1024	1.1473	277
641	右旋苯醚氰菊酯 II	39.45	18.421	33.756	2.1416	1.1687	277
642	氮酮	39.009	18.457	33.948	2.1135	1.1491	225
643	苯氰菊酯 II	39.058	18.301	33.126	2.1342	1.1791	277
644	氰戊菊酯	39.274	18.424	33.815	2.1317	1.1614	198
645	辛酰碘苯腈	39.299	18.235	32.719	2.1551	1.2011	224
646	d-柠檬烯	39.736	18.203	32.712	2.1829	1.2147	197
647	双甲脒	39.547	18.515	34.117	2.1359	1.1592	288
648	伊维菌素	39.624	18.427	33.926	2.1503	1.1680	244
649	辛酰溴苯腈	40.191	18.219	33.536	2.2060	1.1984	220
650	氯菊酯 I	40.847	18.439	33.781	2.2153	1.2092	198

651	阿维菌素	41.006	18.141	32.899	2.2604	1.2464	244
652	氟氰苯菊酯	41.668	18.181	32.602	2.2918	1.2781	268
653	醚菊酯	41.888	18.123	32.717	2.3113	1.2803	273
654	2,4-D 异辛酯	42.133	18.503	34.121	2.2771	1.2348	230
655	苯醚菊酯 I	42.069	18.502	34.012	2.2738	1.2369	272
656	二甲四氯异辛酯	42.253	18.427	33.037	2.2930	1.2790	226 279
657	苯醚菊酯 II	42.873	18.502	34.012	2.3172	1.2605	272
658	氯菊酯 II	42.704	18.439	33.781	2.3160	1.2641	198
659	右旋苯醚菊酯	42.704	18.420	33.833	2.3183	1.2622	272
660	丁硫克百威	42.697	18.129	32.776	2.3552	1.3027	281
661	松脂酸铜	43.286	18.896	34.294	2.2907	1.2622	245
662	联苯菊酯	44.564	18.402	33.770	2.4217	1.3196	198
663	啶虫丙醚(三氯甲吡醚)	46.897	18.127	32.366	2.5871	1.4490	272

附录 2
农药成分—保留值信息数据库（仪器—赛默飞世尔）

序号	农药名称	农药成分与内标物保留时间 (min)			农药成分与内标物保留值比		最大吸收波长 (nm)
		农药成分保留时间	邻苯二甲酸二甲酯	邻苯二甲酸二丁酯	农药成分与邻苯二甲酸二甲酯保留值比	农药成分与邻苯二甲酸二正丁酯保留值比	
1	双丙胺磷钠	2.273	15.183	26.855	0.1497	0.0846	192
2	氯溴异氰尿酸 I	2.345	15.158	26.802	0.1547	0.0875	194
3	磺草灵	2.348	15.182	26.858	0.1547	0.0874	257
4	调环酸钙盐	2.352	15.210	26.828	0.1546	0.0877	273
5	福美肿 I	2.413	15.165	26.822	0.1591	0.0900	254 281
6	三磷锡	2.490	15.207	26.918	0.1637	0.0925	227
7	噻菌铜	2.513	15.233	26.825	0.1650	0.0937	210 234
8	二氯吡啶酸	2.530	15.227	26.945	0.1662	0.0939	221 281
9	皂素	2.548	15.212	26.920	0.1675	0.0947	245
10	甲咪唑烟酸	2.557	15.167	26.813	0.1686	0.0954	270
11	丙烯酸	2.580	15.215	26.928	0.1696	0.0958	195
12	抑芽丹	2.633	15.158	26.815	0.1737	0.0982	217 330
13	氯胺吡啶酸	2.665	15.235	26.838	0.1749	0.0993	218 245
14	氯丙嘧啶酸	2.667	15.400	27.190	0.1732	0.0981	206 237 284
15	甲氧咪草烟	2.695	15.217	26.842	0.1771	0.1004	270
16	氨基吡啶酸	2.707	15.185	26.857	0.1783	0.1008	224
17	百草枯	2.745	15.223	26.922	0.1803	0.1020	200
18	亚硝基草甘膦	2.798	15.157	26.808	0.1846	0.1044	245
19	硝基磺草酮	2.798	15.228	26.943	0.1837	0.1038	257
20	磺草酮	2.843	15.200	26.883	0.1870	0.1058	257
21	咪草烟	2.962	15.242	26.972	0.1943	0.1098	197
22	咪唑乙烟酸	3.077	15.195	26.872	0.2025	0.1145	193
23	氯氟吡氧乙酸	3.205	15.220	26.932	0.2106	0.1190	212
24	苯甲酸	3.225	15.225	26.827	0.2118	0.1202	224
25	赤霉素	3.233	15.190	26.867	0.2128	0.1203	196
26	氯溴异氰尿酸 II	3.233	15.158	26.802	0.2133	0.1206	214
27	单嘧磺隆	3.255	15.152	26.787	0.2148	0.1215	240
28	吲哚乙酸	3.260	15.198	26.868	0.2145	0.1213	221 280
29	申嗪霉素	3.335	15.162	26.792	0.2200	0.1245	252
30	氯化钾	3.367	15.642	27.552	0.2153	0.1222	202
31	灭草啞	3.377	15.252	26.985	0.2214	0.1251	240

32	氯化钠	3.392	15.232	26.862	0.2227	0.1263	200
33	噻磺隆	3.412	15.237	26.953	0.2239	0.1266	234
34	氯化铵	3.437	15.158	26.807	0.2267	0.1282	200
35	代森锰锌	3.470	15.105	26.697	0.2297	0.1300	260 287
36	敌草快	3.485	15.158	26.800	0.2299	0.1300	195
37	甲磺隆	3.485	15.238	26.955	0.2287	0.1293	235
38	威百亩	3.550	15.165	26.842	0.2341	0.1323	204 251 283
39	咪唑烟酸	3.517	15.255	26.933	0.2305	0.1306	267
40	井冈霉素 A	3.593	15.220	26.818	0.2361	0.1340	200
41	氯甲喹啉酸	3.607	15.237	26.837	0.2367	0.1344	214 233
42	环丙环酰胺	3.828	15.142	26.782	0.2528	0.1429	238
43	砒啶磺隆	3.832	15.220	26.935	0.2518	0.1423	242
44	对氯苯氧乙酸 钠 I	3.840	15.203	26.812	0.2526	0.1432	228
45	噻酮磺隆	3.845	15.228	26.853	0.2525	0.1432	240
46	氯磺隆	3.847	15.223	26.922	0.2527	0.1429	238
47	2, 4-二硝基苯 酚钠 I	3.848	15.215	26.832	0.2529	0.1434	221 257
48	酰啶磺隆 I	3.853	15.228	26.852	0.2530	0.1435	242
49	(+)-脱落酸 I	3.867	15.210	26.815	0.2542	0.1442	246
50	氟唑磺隆 I	3.880	15.162	26.795	0.2559	0.1448	233
51	单氰胺	3.902	15.218	26.825	0.2564	0.1455	215
52	对氯苯氧乙酸 钠 II	3.947	15.203	26.812	0.2596	0.1472	228
53	氟唑磺隆 II	4.088	15.162	26.795	0.2696	0.1526	233
54	乙撑硫脲	4.212	15.218	26.813	0.2768	0.1571	234
55	硝磺草酮 I	4.412	15.152	26.798	0.2912	0.1646	257
56	啶啶磺隆 I	4.413	15.183	26.845	0.2907	0.1644	243
57	(+)-脱落酸 II	4.428	15.210	26.815	0.2911	0.1651	246
58	吲哚丁酸	4.437	15.180	26.850	0.2923	0.1653	223 281
59	α -萘乙酸	4.435	15.252	26.985	0.2908	0.1644	223
60	氟唑磺隆 III	4.442	15.162	26.795	0.2930	0.1658	233
61	2, 4-二硝基苯 酚钠 II	4.442	15.215	26.832	0.2919	0.1655	223 257
62	酰啶磺隆 II	4.443	15.228	26.852	0.2918	0.1655	242
63	对氯苯氧乙酸 钠 III	4.467	15.203	26.812	0.2938	0.1666	228
64	酰啶磺隆 III	4.613	15.228	26.852	0.3029	0.1718	242
65	丙烯硫脲	4.752	15.162	26.808	0.3134	0.1773	210 235

66	2, 4-二硝基苯酚钠 III	4.753	15.215	26.832	0.3124	0.1771	223 257
67	噁霉灵	4.823	15.157	26.810	0.3182	0.1799	206
68	对氯苯氧乙酸钠 IV	4.840	15.203	26.812	0.3184	0.1805	228
69	敌敌畏	4.868	15.182	26.870	0.3206	0.1812	267
70	啶嘧磺隆 II	4.875	15.183	26.845	0.3211	0.1816	243
71	灭蝇胺	4.912	15.152	26.795	0.3242	0.1833	210
72	乙酰甲胺磷	4.983	15.225	26.927	0.3273	0.1851	195
73	苯唑草酮	5.073	15.262	26.942	0.3324	0.1883	255 313
74	硝磺草酮 II	5.078	15.152	26.798	0.3351	0.1895	257
75	噻唑锌	5.250	15.165	26.818	0.3462	0.1958	311
76	氧乐果	5.485	15.243	26.982	0.3598	0.2033	193
77	敌枯双	5.547	15.597	27.480	0.3556	0.2019	259
78	醚磺隆	5.570	15.160	26.797	0.3674	0.2079	237
79	抗倒酯	5.677	15.225	26.935	0.3729	0.2108	274
80	2, 4 滴二甲铵盐	6.043	15.150	26.785	0.3989	0.2256	200 231 285
81	吡嘧磺隆	6.070	15.182	26.855	0.3998	0.2260	244
82	宝成(玉嘧)	6.180	15.155	26.807	0.4078	0.2305	242
83	2, 4-D 二甲胺	6.188	15.185	26.862	0.4075	0.2304	230 285
84	2, 4-D 钠	6.298	15.188	26.875	0.4147	0.2343	230 285
85	呋虫胺	6.315	15.140	26.755	0.4171	0.2360	270
86	单嘧磺酯	6.330	15.212	26.845	0.4161	0.2358	240
87	呋喃磺草酮	6.363	15.232	26.867	0.4177	0.2368	259 288
88	萘乙酸钠	6.440	15.230	26.870	0.4228	0.2397	223
89	甲嘧磺隆	6.448	15.162	26.818	0.4253	0.2404	241
90	氟吡磺隆	6.492	15.188	26.893	0.4274	0.2414	250
91	溴硝醇	6.733	15.203	26.825	0.4429	0.2510	199
92	春雷霉素	6.888	15.220	26.947	0.4526	0.2556	204
93	甲基硫环磷 I	7.128	15.165	26.847	0.4700	0.2655	230
94	二甲四氯二甲胺盐	7.398	15.218	26.825	0.4861	0.2758	230 281
95	2, 6-二氟酰胺	7.572	15.197	26.888	0.4983	0.2816	265
96	吡蚜酮	7.590	15.127	26.730	0.5018	0.2840	300
97	杀线威	8.048	15.237	26.958	0.5282	0.2985	217
98	烯啶虫胺	8.113	15.137	26.753	0.5360	0.3033	215 270 311
99	苯磺隆 I	8.237	15.238	26.950	0.5406	0.3056	256
100	杀鼠醚 I	8.573	15.215	26.925	0.5635	0.3184	208 311
101	甲基碘磺隆钠盐	9.097	15.200	26.830	0.5985	0.3391	238

102	羟烯腺嘌呤	8.258	15.138	26.753	0.5455	0.3087	208 269
103	灭多威	9.483	15.212	26.895	0.6234	0.3526	235
104	久效磷	9.782	15.228	26.920	0.6424	0.3634	215
105	杀鼠醚 II	9.868	15.215	26.925	0.6486	0.3665	208 311
106	噻节因	9.878	15.242	26.892	0.6481	0.3673	203
107	苯磺隆 II	9.988	15.238	26.950	0.6555	0.3706	256
108	五氟磺草胺	9.995	15.172	26.822	0.6588	0.3726	231 285
109	棉隆	9.997	15.235	26.885	0.6562	0.3718	280
110	拿扑净 I	9.997	15.253	26.993	0.6554	0.3704	284
111	四唑嘧磺隆	10.023	15.260	26.937	0.6568	0.3721	243
112	二氯喹啉酸	10.147	15.228	27.203	0.6663	0.3730	212 242
113	噻吡嘧磺隆	10.273	15.207	26.828	0.6755	0.3829	244
114	胺苯磺隆	10.307	15.190	26.868	0.6785	0.3836	228
115	烟嘧磺隆 I	10.313	15.140	26.768	0.6812	0.3853	243
116	双草醚	10.318	15.167	26.833	0.6803	0.3845	246
117	甲基硫环磷 II	10.373	15.167	26.847	0.6839	0.3864	252
118	氯吡嘧磺隆	10.485	15.242	26.888	0.6879	0.3900	246
119	啶磺草胺	10.547	15.257	26.943	0.6913	0.3915	223 294
120	噻虫嗪	10.612	15.227	26.948	0.6969	0.3938	253
121	三氮唑嘧啶酮	10.613	15.170	26.818	0.6996	0.3957	201 302
122	氯嘧磺隆	10.680	15.222	26.920	0.7016	0.3967	245
123	肟草酮 I	10.717	15.215	26.832	0.7044	0.3994	284
124	环吡氟草酮	10.735	15.403	27.197	0.6969	0.3947	270
125	氟啶虫酰胺	10.738	15.240	26.975	0.7046	0.3981	266
126	环磺酮 I	10.752	15.345	27.465	0.7007	0.3915	260 288
127	赤霉素 GA4+7	10.767 胖峰	15.230	26.852	#VALUE!	#VALUE!	190
128	环磺酮 II	10.865	15.345	27.465	0.7080	0.3956	260 288
129	双氯磺草胺	10.992	15.238	26.838	0.7214	0.4096	245
130	环氧虫啶	11.000	15.258	26.937	0.7209	0.4084	213 273 346
131	烯草酮锂盐 I	11.017	15.193	26.882	0.7251	0.4098	283
132	三氟啶磺隆钠 I	11.105	15.232	26.892	0.7291	0.4129	243
133	苄嘧磺隆 I	11.170	15.142	26.757	0.7377	0.4175	228 261
134	丙噻嘧磺隆 I	11.277	15.247	26.907	0.7396	0.4191	278 261
135	噻霉酮	11.417	15.213	26.943	0.7505	0.4237	225 319
136	噻虫胺	11.527	15.140	26.755	0.7614	0.4308	268
137	对硝基苯酚钾	11.588	15.190	26.857	0.7629	0.4315	227 320
138	苯嘧磺草胺	11.618	15.220	26.843	0.7633	0.4328	271
139	4, 4'-联吡啶	11.620	15.172	26.820	0.7659	0.4333	240
140	吡虫啉	11.683	15.160	26.807	0.7706	0.4358	271

141	甲基嘧啶磷 I	11.718	15.162	26.800	0.7729	0.4372	227 299
142	苯噻草酮	11.730	15.192	26.877	0.7721	0.4364	309
143	杀螟丹	11.885	15.223	26.908	0.7807	0.4417	190
144	烟嘧磺隆 II	11.918	15.140	26.768	0.7872	0.4452	243
145	螺螨酯杂质	12.017	15.645	27.553	0.7681	0.4361	254
146	3-甲基吡啶	12.070	15.225	26.860	0.7928	0.4494	262
147	氟磺胺草醚	12.312	15.178	26.842	0.8112	0.4587	292
148	氯噻啉	12.330	15.220	26.798	0.8101	0.4601	249
149	多菌灵	12.387	15.167	26.828	0.8167	0.4617	285
150	三氟羧草醚	12.407	15.190	26.863	0.8168	0.4619	206 293
151	苯菌灵	12.608	15.180	26.847	0.8306	0.4696	205 241 285
152	啶虫脒	12.730	15.168	26.828	0.8393	0.4745	245
153	乐果	12.765	15.222	26.922	0.8386	0.4741	195
154	唑啶磺草胺	12.900	15.153	26.783	0.8513	0.4816	270
155	嘧苯胺磺隆 I	13.210	15.350	27.458	0.8606	0.4811	233
156	三氟啶磺隆钠 II	13.487	15.232	26.892	0.8854	0.5015	243
157	三氯吡氧乙酸	13.537	15.220	26.950	0.8894	0.5023	235 297
158	藜芦碱	13.595	15.157	26.795	0.8969	0.5074	217 307
159	氟吡呋喃酮	13.598	15.383	27.488	0.8840	0.4947	261
160	氟胺磺隆	13.657	15.235	26.822	0.8964	0.5092	235
161	氯酯磺草胺	13.707	15.447	27.197	0.8874	0.5040	210 249
162	三环唑	13.735	15.208	26.885	0.9031	0.5109	224
163	噻菌灵	13.743	15.152	26.783	0.9070	0.5131	299
164	邻硝基苯酚钾	13.763	15.190	26.857	0.9061	0.5125	210 277
165	霜脍氰	13.768	15.170	26.827	0.9076	0.5132	243
166	硫环磷	13.898	15.140	26.767	0.9180	0.5192	251
167	2, 2-联吡啶	13.933	15.163	26.845	0.9189	0.5190	235 282
168	5-硝基邻苯甲 氧基苯酚钠	13.933	15.105	26.697	0.9224	0.5219	210 243
169	苄氨基嘌呤	13.937	15.277	26.992	0.9123	0.5163	269
170	异戊烯基腺嘌 呤	13.942	15.145	26.767	0.9206	0.5209	269
171	2, 4-二硝基苯 酚钾	13.943	15.188	26.860	0.9180	0.5191	243
172	噻虫啉	13.970	15.155	26.792	0.9218	0.5214	244
173	拌种灵	13.980	15.220	26.828	0.9185	0.5211	306
174	乙氧磺隆	14.017	15.242	26.913	0.9196	0.5208	242
175	氯鼠酮	14.103	15.228	26.867	0.9261	0.5249	224 286
176	甲酰胺基嘧磺 隆	14.108	15.218	26.820	0.9271	0.5260	250

177	溴敌隆	14.172	15.215	26.933	0.9314	0.5262	260 312
178	2, 6-二氟苯胺	14.418	15.407	27.182	0.9358	0.5304	229 271
179	涕灭威	14.452	15.232	26.925	0.9488	0.5368	248
180	卡草胺	14.508	15.183	26.853	0.9555	0.5403	235
181	吡虫定 I	14.527	15.398	27.183	0.9434	0.5344	213 273
182	雷公藤甲素	14.545	15.198	26.817	0.9570	0.5424	219
183	磷胺	14.565	15.200	26.782	0.9582	0.5438	197
184	溴菌腈	14.573	15.158	26.800	0.9614	0.5438	194
185	双氟磺草胺	14.592	15.188	26.898	0.9608	0.5425	257
186	丁噻隆	14.743	15.232	26.868	0.9679	0.5487	254
187	氨唑草酮	14.753	15.235	26.827	0.9684	0.5499	221
188	噁虫酮	14.782	15.217	26.863	0.9714	0.5503	278
189	氰草津	14.808	15.165	26.840	0.9765	0.5517	220
190	噁霜灵	14.852	15.202	26.865	0.9770	0.5528	197
191	环嗪酮	14.868	15.137	26.755	0.9822	0.5557	248
192	噻吩磺隆	14.873	15.152	26.782	0.9816	0.5553	229
193	灭蚜威	14.897	15.198	26.867	0.9802	0.5545	220 266
194	速灭威	14.912	15.242	26.892	0.9783	0.5545	195 263
195	除草定	14.963	15.222	26.868	0.9830	0.5569	276
196	西玛津	14.977	15.177	26.822	0.9868	0.5584	222
197	噻苯隆	15.008	15.157	26.790	0.9902	0.5602	230 289
198	麦草畏	15.027	15.155	26.812	0.9916	0.5605	193
199	叶枯唑	15.045	15.222	26.840	0.9884	0.5605	322
200	甲基硫菌灵	15.143	15.148	26.808	0.9997	0.5649	267
201	甲基吡噁磷	15.148	15.242	26.993	0.9938	0.5612	232 295
202	氰烯菌酯	15.152	15.175	26.855	0.9985	0.5642	289
203	三氟苯嘧啶	15.270	15.265	26.840	1.0003	0.5689	204 234
204	呋苯硫脲	15.433	15.202	26.915	1.0152	0.5734	311
205	甲磺草胺	15.440	15.240	26.842	1.0131	0.5752	208
206	噻草酮	15.483	15.180	26.825	1.0200	0.5772	295
207	残杀威	15.498	15.215	26.910	1.0186	0.5759	271
208	恶虫威	15.537	15.210	26.845	1.0215	0.5788	200 278
209	三唑锡	15.632	15.157	26.795	1.0313	0.5834	199
210	克百威	15.645	15.223	26.920	1.0277	0.5812	279
211	硫双威	15.717	15.157	26.803	1.0369	0.5864	236
212	对氯苯酚	15.718	15.142	26.770	1.0380	0.5871	227 282
213	拉维因	15.792	15.207	26.915	1.0385	0.5867	236
214	三十烷醇	15.793	15.243	26.897	1.0361	0.5872	194
215	烯丙苯噻唑	15.898	15.245	26.897	1.0428	0.5911	208 272
216	乙嘧酚 I	15.912	15.155	26.787	1.0500	0.5940	225
217	伯酰胺	15.927	15.163	26.805	1.0504	0.5942	197

218	福美肿 II	15.937	15.165	26.822	1.0509	0.5942	194
219	呋喃酚	16.017	15.173	26.818	1.0556	0.5972	203 281
220	乙嘧酚 II	16.032	15.155	26.787	1.0579	0.5985	225
221	2, 6-二甲基苯胺	16.040	15.645	27.545	1.0252	0.5823	232 282
222	烯草酮锂盐 II	16.048	15.193	26.882	1.0563	0.5970	282
223	喹啉铜	16.063	15.158	26.807	1.0597	0.5992	257
224	福美双	16.092	15.252	26.987	1.0551	0.5963	275
225	2, 4, 6-三氯苯酚	16.092	15.168	26.818	1.0609	0.6000	250
226	乙嘧酯	16.117	15.195	26.853	1.0607	0.6002	225 297
227	驱蚊酯	16.137	15.203	26.832	1.0614	0.6014	200
228	印楝素 I	16.140	15.162	26.815	1.0645	0.6019	216
229	拿扑净 II	16.150	15.253	26.993	1.0588	0.5983	283
230	菱锈灵	16.210	15.160	26.790	1.0693	0.6051	252 294
231	甲萘威	16.245	15.240	26.977	1.0659	0.6022	220
232	1, 2-二溴乙烷	16.283	15.240	26.877	1.0684	0.6058	205
233	2-乙基-6-甲基-2-氯乙酰苯胺	16.310	15.427	27.202	1.0572	0.5996	197
234	甲基二磺隆	16.340	15.205	26.938	1.0746	0.6066	238
235	丙噻啉磺隆 II	16.378	15.253	26.918	1.0738	0.6084	233
236	溴氰虫酰胺	16.385	15.165	26.803	1.0804	0.6113	264
237	印楝素 II	16.428	15.162	26.815	1.0835	0.6126	216
238	哌虫啉 II	16.487	15.398	27.183	1.0707	0.6065	212 273
239	杀鼠灵 (溴鼠灵)	16.563	15.217	26.930	1.0885	0.6150	264
240	噻啉菌胺	16.575	15.165	26.832	1.0930	0.6177	310
241	双唑草酮	16.587	15.372	27.402	1.0790	0.6053	242
242	绿麦隆	16.592	15.225	26.855	1.0898	0.6178	235
243	噻苯胺磺隆 II	16.602	15.350	27.458	1.0816	0.6046	237
244	抗蚜威	16.608	15.212	26.918	1.0918	0.6170	246
245	噻啉磷	16.660	15.140	26.755	1.1004	0.6227	219
246	肟草酮 II	16.663	15.215	26.832	1.0952	0.6210	283
247	西草净	16.705	15.180	26.858	1.1005	0.6220	222
248	粉唑醇	16.725	15.217	26.843	1.0991	0.6231	263
249	莠去津	16.805	15.153	26.783	1.1090	0.6275	222
250	氯吡脞	16.815	15.187	26.857	1.1072	0.6261	264
251	菌核净	16.835	15.190	26.867	1.1083	0.6266	201
252	氟鼠灵	16.845	15.190	26.805	1.1090	0.6284	312
253	抑食肼	16.912	15.348	27.467	1.1019	0.6157	222

254	杀螺胺乙醇胺盐	16.985	15.165	26.803	1.1200	0.6337	235 336
255	丁子香酚	17.047	15.183	26.855	1.1228	0.6348	200 282
256	氟吗啉 I	17.090	15.220	26.833	1.1229	0.6369	277
257	丁香酚	17.093	15.218	26.852	1.1232	0.6366	201 282
258	异丙隆	17.150	15.265	26.967	1.1235	0.6360	242
259	敌草隆	17.153	15.155	26.785	1.1318	0.6404	251
260	异丙威	17.153	15.218	26.917	1.1272	0.6373	197 262
261	双唑草腈	17.265	15.215	26.828	1.1347	0.6435	236
262	吡草胺	17.267	15.183	26.855	1.1373	0.6430	220
263	甲霜灵	17.287	15.155	26.787	1.1407	0.6454	206 267
264	精甲霜灵	17.288	15.158	26.810	1.1405	0.6448	267
265	避蚊胺	17.305	15.257	26.933	1.1342	0.6425	199
266	吡唑草胺	17.310	15.233	26.822	1.1363	0.6454	198 266
267	瑞毒霉	17.318	15.193	26.882	1.1399	0.6442	198 267
268	混灭威	17.370	15.202	26.827	1.1426	0.6475	198 268
269	2-甲基-6-乙基苯胺	17.380	15.405	27.187	1.1282	0.6393	201 234 284
270	氟吗啉 II	17.382	15.220	26.833	1.1420	0.6478	239
271	苄嘧磺隆 II	17.517	15.142	26.757	1.1568	0.6547	237
272	氯虫苯甲酰胺	17.540	15.142	26.755	1.1584	0.6556	200
273	二溴磷	17.552	15.200	26.903	1.1547	0.6524	195
274	烟碱	17.663	15.242	26.962	1.1588	0.6551	261
275	甜菜安	17.695	15.225	26.857	1.1622	0.6589	237 273
276	氟烯线砒	17.730	15.215	26.860	1.1653	0.6601	273
277	砒吡草唑	17.813	15.190	26.813	1.1727	0.6643	226
278	双丙环虫酯	17.855	15.213	26.742	1.1737	0.6677	232 319
279	异噁草松	17.868	15.168	26.815	1.1780	0.6663	220
280	甜菜宁	17.870	15.228	26.833	1.1735	0.6660	238
281	丙硫多菌灵	17.932	15.230	26.868	1.1774	0.6674	217 296
282	哒优麦	17.955	15.235	26.945	1.1785	0.6664	272
283	丙炔氟草胺	18.007	15.172	26.835	1.1869	0.6710	216 290
284	氟啶草酮	18.017	15.203	26.807	1.1851	0.6721	235 308
285	异噁唑草酮	18.023	15.165	26.837	1.1885	0.6716	270
286	杀扑磷	18.203	15.237	26.962	1.1947	0.6751	215
287	莠灭净	18.212	15.163	26.838	1.2011	0.6786	222
288	乙霉威	18.243	15.240	26.962	1.1970	0.6766	207 244 288
289	烯酰吗啉 I	18.250	15.163	26.815	1.2036	0.6806	239
290	4-溴-2-氯苯酚	18.258	15.178	26.837	1.2029	0.6803	226 288
291	Z-噻草醚	18.282	15.310	27.342	1.1941	0.6686	200 282

292	克菌丹	18.373	15.178	26.840	1.2105	0.6845	198 245
293	解草酮	18.395	15.143	26.778	1.2148	0.6869	258 291
294	呋草酮	18.403	15.260	26.948	1.2060	0.6829	276
295	福美肿 III	18.437	15.165	26.822	1.2158	0.6874	194
296	仲丁威	18.437	15.212	26.883	1.2120	0.6858	197 262
297	敌稗	18.440	15.233	26.882	1.2105	0.6860	209 252
298	嘧菌酯	18.485	15.155	26.775	1.2197	0.6904	201
299	苯噻菌胺	18.512	15.183	26.840	1.2193	0.6897	220 255
300	嘧霉胺	18.585	15.222	26.922	1.2209	0.6903	270
301	多效唑	18.592	15.247	26.977	1.2194	0.6892	221
302	2, 6-二乙基苯胺	18.682	15.225	26.858	1.2271	0.6956	203 235
303	乙虫腈	18.688	15.233	26.830	1.2268	0.6965	280
304	特丁津	18.698	15.180	26.815	1.2318	0.6973	223
305	环酯草醚	18.755	15.232	26.947	1.2313	0.6960	237
306	氟氯吡啶酯	18.773	15.217	26.857	1.2337	0.6990	250
307	草除灵	18.798	15.238	26.952	1.2336	0.6975	219
308	利谷隆	18.808	15.253	26.995	1.2331	0.6967	250
309	咯菌腈	18.810	15.157	26.812	1.2410	0.7016	266
310	双炔酰菌胺	18.843	15.222	26.935	1.2379	0.6996	224
311	甲基对硫磷	18.923	15.150	26.790	1.2490	0.7063	275
312	烯酰吗啉 II	18.933	15.163	26.815	1.2486	0.7061	246
313	啶酰菌胺	19.048	15.190	26.840	1.2540	0.7097	198
314	异噻菌胺	19.065	15.262	26.952	1.2492	0.7074	280
315	烟酰胺	19.103	15.235	26.885	1.2539	0.7105	200
316	SP-2	19.142	15.215	26.887	1.2581	0.7119	198
317	环唑醇 I	19.197	15.203	26.798	1.2627	0.7164	221
318	三唑醇	19.263	15.233	26.940	1.2646	0.7150	224
319	氟吡菌胺	19.268	15.177	26.822	1.2696	0.7184	270
320	苜草隆	19.275	15.262	26.953	1.2629	0.7151	195
321	氟噻唑吡乙酮	19.293	15.205	26.845	1.2689	0.7187	259
322	乙氧呋草黄	19.308	15.227	26.857	1.2680	0.7189	227 280
323	二氰蒽醌	19.312	15.180	26.817	1.2722	0.7201	233
324	缬菌胺 I	19.357	15.343	27.432	1.2616	0.7056	221
325	香芹酚	19.385	15.198	26.883	1.2755	0.7211	220 276
326	缬霉威	19.393	15.215	26.828	1.2746	0.7229	220 265
327	炔苯酰草胺	19.402	15.162	26.805	1.2796	0.7238	205
328	啶菌噁唑 I	19.433	15.222	26.858	1.2766	0.7235	221 261
329	戊炔草胺	19.445	15.183	26.858	1.2807	0.7240	206
330	丙硫菌唑	19.450	15.183	26.825	1.2810	0.7251	253
331	E-嘧草醚	19.473	15.360	27.425	1.2678	0.7100	246

332	2,2':6',2'' -三联吡啶	19.532	15.645	27.552	1.2484	0.7089	233 282
333	三唑酮	19.587	15.157	26.795	1.2923	0.7310	222 275
334	甲氧虫酰肼	19.592	15.227	26.950	1.2867	0.7270	194 279
335	螺虫乙酯	19.605	15.137	26.757	1.2952	0.7327	200
336	苯噻酰草胺	19.615	15.180	26.868	1.2922	0.7301	217
337	灭菌唑	19.678	15.260	26.937	1.2895	0.7305	262
338	2-氯-4-溴苯 酚	19.682	15.643	27.552	1.2582	0.7144	226 288
339	环唑醇 II	19.732	15.203	26.798	1.2979	0.7363	221
340	氟酰胺	19.778	15.238	26.892	1.2979	0.7355	248
341	联苯肼菊	19.790	15.162	26.792	1.3052	0.7387	232 266
342	缬菌胺 II	19.798	15.343	27.432	1.2904	0.7217	221
343	氟啶唑	19.803	15.215	26.827	1.3015	0.7382	224 274
344	氯苯胺灵	19.828	15.258	26.935	1.2995	0.7361	206 239
345	氟吡菌酰胺	19.833	15.172	26.865	1.3072	0.7382	270
346	联苯肼酯	19.842	15.187	26.877	1.3065	0.7383	232
347	四氯虫酰胺	19.847	15.212	26.890	1.3047	0.7381	199
348	禾草敌	19.862	15.245	26.913	1.3029	0.7380	205
349	灭菌丹	19.872	15.208	26.828	1.3067	0.7407	224
350	百菌清	19.885	15.202	26.863	1.3081	0.7402	233
351	腈菌唑	19.885	15.163	26.815	1.3114	0.7416	222
352	氟环唑	20.007	15.163	26.813	1.3195	0.7462	205 264
353	氟唑环菌胺 I	20.015	15.403	27.167	1.2994	0.7367	216
354	马拉硫磷	20.062	15.235	26.937	1.3168	0.7448	200
355	杀螺胺	20.145	15.198	26.778	1.3255	0.7523	211 234 336
356	环酰菌胺	20.155	15.178	26.828	1.3279	0.7513	202 288
357	稻瘟灵	20.168	15.223	26.903	1.3248	0.7497	307
358	甲基嘧啶磷 II	20.172	15.162	26.800	1.3304	0.7527	249
359	扑草净	20.215	15.247	26.965	1.3258	0.7497	223
360	啶菌噁唑 II	20.240	15.222	26.858	1.3297	0.7536	221 260
361	噻菌胺	20.242	15.272	26.985	1.3254	0.7501	273
362	双环磺草酮	20.258	15.243	26.897	1.3290	0.7532	325
363	四氟醚唑	20.282	15.158	26.800	1.3380	0.7568	218
364	炔咪菊酯 I	20.305	15.200	26.892	1.3359	0.7551	198
365	杀螟硫磷	20.337	15.237	26.945	1.3347	0.7548	270
366	八氯二丙醚	20.343	15.230	26.933	1.3357	0.7553	214
367	三唑磷	20.362	15.228	26.922	1.3371	0.7563	244
368	氟嘧菌酯	20.458	15.235	26.885	1.3428	0.7609	252
369	敌草胺	20.480	15.237	26.953	1.3441	0.7598	214 290
370	腐霉利	20.485	15.202	26.877	1.3475	0.7622	203

371	氟醚菌酰胺	20.515	15.227	26.860	1.3473	0.7638	215 267
372	啶硫磷 I	20.542	15.223	26.925	1.3494	0.7629	242
373	特丁净	20.642	15.228	26.868	1.3555	0.7683	223
374	苯线磷	20.683	15.185	26.883	1.3621	0.7694	251
375	四氯苯酞	20.730	15.228	26.853	1.3613	0.7720	220 251
376	炔咪菊酯 II	20.743	15.200	26.892	1.3647	0.7713	198
377	灭线磷	20.758	15.222	26.918	1.3637	0.7712	230
378	环虫酰肼	20.785	15.430	27.140	1.3471	0.7658	249
379	烯效唑	20.795	15.215	26.888	1.3667	0.7734	254
380	氟噻草胺	20.832	15.213	26.817	1.3694	0.7768	199
381	二氯喹啉草酮	20.893	15.167	26.737	1.3775	0.7814	228
382	鱼藤酮	20.933	15.142	26.753	1.3824	0.7825	237 295
383	氯吡磷	20.980	15.177	26.835	1.3824	0.7818	194
384	除虫脲	21.000	15.207	26.873	1.3809	0.7815	258
385	氨磺乐灵	21.005	15.212	26.793	1.3808	0.7840	285
386	氯唑磷	21.007	15.233	26.850	1.3790	0.7824	194
387	乙草胺	21.187	15.167	26.827	1.3969	0.7898	265
388	氟硅唑	21.208	15.220	26.932	1.3934	0.7875	230
389	氟唑环菌胺 II	21.237	15.403	27.167	1.3788	0.7817	216 259
390	1, 4-二氯苯	21.237	15.177	26.823	1.3993	0.7917	224
391	苯氧威 (双氧威)	21.245	15.227	26.882	1.3952	0.7903	229 279
392	对-二氯苯	21.260	15.178	26.845	1.4007	0.7920	224
393	甲草胺	21.360	15.217	26.913	1.4037	0.7937	198
394	噻呋酰胺	21.367	15.167	26.852	1.4088	0.7957	203
395	腈苯唑	21.368	15.242	26.895	1.4019	0.7945	225
396	异丙甲草胺	21.405	15.178	26.827	1.4103	0.7979	197 266
397	苯硫威	21.548	15.180	26.843	1.4195	0.8027	220 271
398	精异丙甲草胺	21.550	15.267	26.955	1.4115	0.7995	198 266
399	蛇床子素	21.580	15.167	26.823	1.4228	0.8045	322
400	呋喃虫酰肼	21.582	15.415	27.193	1.4001	0.7937	290
401	灭幼脲	21.637	15.138	26.750	1.4293	0.8089	257
402	氰霜唑	21.682	15.160	26.810	1.4302	0.8087	280
403	苦参碱	21.712	15.212	26.917	1.4273	0.8066	193
404	异稻瘟净	21.713	15.203	26.835	1.4282	0.8091	196
405	硫丹醇	21.782	15.180	26.823	1.4349	0.8121	213
406	乙烯菌核利	21.790	15.230	26.853	1.4307	0.8115	202
407	虫酰肼	21.792	15.193	26.893	1.4343	0.8103	235
408	氯氟氰虫酰胺	21.867	15.143	26.777	1.4440	0.8166	200 250
409	戊唑醇	21.923	15.220	26.930	1.4404	0.8141	221
410	硅噻菌胺	22.055	15.160	26.810	1.4548	0.8226	246

411	氟螨嗪	22.077	15.270	26.957	1.4458	0.8190	269
412	大蒜素 I	22.122	15.427	27.202	1.4340	0.8132	198
413	唑草酮	22.153	15.185	26.843	1.4589	0.8253	245
414	氟虫双酰胺	22.210	15.165	26.838	1.4646	0.8276	240
415	醚菌酯	22.218	15.218	26.897	1.4600	0.8260	198
416	氟噻甲草酯	22.235	15.195	26.755	1.4633	0.8311	199
417	氟苯虫酰胺 (氟虫双酰胺)	22.240	15.205	26.852	1.4627	0.8282	198
418	氟唑菌苯胺	22.253	15.243	26.903	1.4599	0.8272	198
419	氟虫腈	22.270	15.137	26.748	1.4712	0.8326	205 282
420	稻瘟酰胺 I	22.310	15.153	26.790	1.4723	0.8328	230 285
421	乙嘧酚磺酸酯	22.347	15.153	26.793	1.4748	0.8341	242
422	啶氧菌酯	22.360	15.152	26.797	1.4757	0.8344	217 246
423	内吸磷	22.452	15.142	26.772	1.4828	0.8386	198
424	喹硫磷 II	22.487	15.223	26.925	1.4772	0.8352	239
425	啞菌环胺	22.505	15.225	26.935	1.4782	0.8355	270
426	稻瘟酰胺 II	22.553	15.153	26.790	1.4884	0.8418	230 285
427	炔草酯	22.658	15.193	26.880	1.4913	0.8429	226 280
428	戊菌唑	22.678	15.183	26.865	1.4936	0.8441	220
429	SP-1	22.847	15.225	26.827	1.5006	0.8516	210
430	氯氟醚菌唑	22.945	15.223	26.955	1.5073	0.8512	232
431	稻丰散	23.003	15.223	26.835	1.5111	0.8572	225
432	吡草醚	23.203	15.142	26.763	1.5324	0.8670	245 292
433	丙环唑 I	23.290	15.195	26.872	1.5327	0.8667	194
434	叶菌唑	23.300	15.155	26.793	1.5374	0.8696	194 221
435	氟啶胺 I	23.327	15.195	26.877	1.5352	0.8679	208 261
436	抑霉唑	23.470	15.148	26.782	1.5494	0.8763	193
437	异丙草胺	23.499	15.148	26.782	1.5513	0.8774	218 265
438	精苯霜灵	23.535	15.197	26.808	1.5487	0.8779	198 265
439	丁吡吗啉	23.543	15.207	26.803	1.5482	0.8784	245 273
440	唑菌酯	23.570	15.203	26.808	1.5504	0.8792	254
441	甲基异硫磷	23.622	15.195	26.873	1.5546	0.8790	220 278
442	己唑醇	23.622	15.152	26.793	1.5590	0.8816	220
443	杀铃脲	23.627	15.165	26.818	1.5580	0.8810	249
444	莎稗磷	23.940	15.168	26.813	1.5783	0.8929	220
445	丙环唑 II	23.963	15.195	26.872	1.5770	0.8917	194
446	蝇毒磷	24.100	15.167	26.842	1.5890	0.8978	316
447	补骨脂乙素	24.190	15.225	26.850	1.5888	0.9009	202 369
448	噁唑菌酮	24.227	15.190	26.867	1.5949	0.9017	230
449	苯酰锰锌	24.260	15.162	26.793	1.6001	0.9055	212 241

450	甲基嘧啶磷 III	24.280	15.162	26.800	1.6014	0.9060	247
451	二嗪磷	24.285	15.240	26.957	1.5935	0.9009	247
452	苯酰菌胺	24.328	15.177	26.840	1.6030	0.9064	212
453	苯并烯氟菌唑	24.365	15.420	27.197	1.5801	0.8959	214 250
454	地虫硫磷	24.375	15.192	26.893	1.6045	0.9064	239
455	吡唑醚菌酯	24.418	15.140	26.755	1.6128	0.9127	275
456	四螨嗪	24.492	15.200	26.868	1.6113	0.9116	271
457	咪鲜胺	24.500	15.155	26.793	1.6166	0.9144	210
458	杀虫脒	24.545	15.200	26.882	1.6148	0.9131	266
459	氟啶胺 II	24.622	15.195	26.877	1.6204	0.9161	209 261
460	烯唑醇	24.778	15.212	26.887	1.6288	0.9216	250
461	禾草丹	24.872	15.140	26.780	1.6428	0.9288	225
462	辛硫磷	24.877	15.142	26.760	1.6429	0.9296	282
463	丙炔噁草酮	24.878	15.230	26.863	1.6335	0.9261	203 291
464	吡唑菌胺	24.903	15.643	27.553	1.5920	0.9038	227
465	解草唑	24.940	15.187	26.852	1.6422	0.9288	308
466	吡唑解草酯	25.037	15.207	26.938	1.6464	0.9294	308
467	唑啉草酯	25.055	15.197	26.895	1.6487	0.9316	260
468	甲基立枯磷	25.057	15.200	26.863	1.6485	0.9328	200 275
469	丁虫脒	25.072	15.247	26.860	1.6444	0.9334	287
470	苯醚甲环唑 I	25.092	15.170	26.828	1.6541	0.9353	230 274
471	甲拌磷	25.095	15.240	26.942	1.6467	0.9314	193
472	氯氟吡啶酯	25.115	15.187	26.855	1.6537	0.9352	245
473	环氟菌胺	25.268	15.233	26.872	1.6588	0.9403	236
474	毒氟磷	25.302	15.265	26.955	1.6575	0.9387	228 269
475	戊菌隆	25.305	15.272	26.982	1.6570	0.9378	240
476	唑啉菌胺	25.363	15.250	26.877	1.6631	0.9437	219 295
477	苯醚甲环唑 II	25.340	15.170	26.828	1.6704	0.9445	230 274
478	甲基嘧啶磷 IV	25.397	15.162	26.800	1.6750	0.9476	249
479	异菌脲	25.415	15.142	26.753	1.6784	0.9500	250
480	氯丙炔菊酯	25.428	15.208	26.932	1.6720	0.9442	225
481	甲基毒死蜱	25.433	15.227	26.942	1.6703	0.9440	230 290
482	甲羧除草醚	25.518	15.177	26.805	1.6814	0.9520	293
483	高效氟吡甲禾 灵	25.523	15.167	26.823	1.6828	0.9515	259 276
484	硫线磷	25.598	15.187	26.887	1.6855	0.9521	228
485	种菌唑	25.618	15.257	26.930	1.6791	0.9513	222
486	吡氟酰草胺	25.665	15.177	26.837	1.6910	0.9563	284
487	苯菌酮	25.705	15.238	26.892	1.6869	0.9559	286
488	氟铃脲	25.750	15.188	26.857	1.6954	0.9588	255

489	大蒜素 II	25.767	15.427	27.202	1.6703	0.9472	198
490	吡唑萘菌胺	25.767	15.200	26.925	1.6952	0.9570	250
491	硫丹醚	25.845	15.180	26.825	1.7026	0.9635	219
492	噻螨酯	25.845	15.227	26.850	1.6973	0.9626	251
493	茚虫威	25.945	15.205	26.928	1.7063	0.9635	310
494	喹禾糖酯	25.947	15.228	26.852	1.7039	0.9663	236
495	肟菌酯	25.958	15.168	26.858	1.7114	0.9665	250
496	溴虫氟苯双酰胺	25.973	15.202	26.828	1.7085	0.9681	198
497	啶草丹	25.973	15.253	26.918	1.7028	0.9649	198
498	甲萘灵	26.087	15.198	26.822	1.7165	0.9726	226 289
499	炔丙菊酯	26.155	15.215	26.930	1.7190	0.9712	225
500	莠去醇	26.157	15.200	26.817	1.7209	0.9754	194
501	烯肟菌胺	26.177	15.225	26.788	1.7193	0.9772	221 274
502	精噁唑禾草灵	26.167	15.193	26.850	1.7223	0.9746	240 278
503	解草啶	26.218	15.143	26.757	1.7314	0.9799	267
504	丙酯草醚	26.247	15.233	26.820	1.7230	0.9786	304
505	氰氟草酯	26.325	15.165	26.822	1.7359	0.9815	234 249
506	噁唑酰草胺	26.335	15.203	26.840	1.7322	0.9812	239 278
507	氟菌唑	26.347	15.193	26.850	1.7342	0.9813	237
508	氟酰胺	26.353	15.223	26.850	1.7311	0.9815	253
509	精噻禾灵	26.357	15.163	26.823	1.7382	0.9826	237
510	2, 4-D 丁酯	26.382	15.238	26.948	1.7313	0.9790	229
511	苯醚菌酯	26.397	15.633	27.530	1.6885	0.9588	200
512	禾草克	26.455	15.222	26.942	1.7379	0.9819	236
513	丙草胺	26.585	15.192	26.883	1.7499	0.9889	198
514	氟硫草定	26.617	15.238	26.827	1.7468	0.9922	199 250
515	除草醚	26.635	15.232	26.818	1.7486	0.9932	297
516	乙羧氟草醚	26.655	15.227	26.945	1.7505	0.9892	292
517	虫螨腈	26.913	15.140	26.760	1.7776	1.0057	261
518	丙溴磷	26.943	15.197	26.892	1.7729	1.0019	220
519	七氟甲醚	26.957	15.185	26.860	1.7752	1.0036	273
520	胺菊酯 I	26.962	15.217	26.893	1.7718	1.0026	222
521	噁草酸	26.975	15.172	26.913	1.7779	1.0023	236
522	吡螨胺	27.040	15.268	27.013	1.7710	1.0010	220
523	环戊噁草酮	27.057	15.192	26.855	1.7810	1.0075	249 289
524	唑虫酰胺	27.078	15.152	26.794	1.7871	1.0106	233
525	丙硫克百威	27.223	15.198	26.868	1.7912	1.0132	280
526	噁嗪草酮	27.248	15.168	26.835	1.7964	1.0154	201
527	烯肟菌酯	27.352	15.220	26.827	1.7971	1.0196	293

528	氟吡草胺（氟吡酰草胺）	27.443	15.217	26.858	1.8034	1.0218	291
529	增效磷	27.587	15.230	26.875	1.8114	1.0265	239 290
530	嘧啶肟草醚	27.592	15.180	26.853	1.8177	1.0275	247
531	精吡氟禾草灵	27.598	15.220	26.837	1.8133	1.0284	224 270
532	增效醚	27.628	15.205	26.928	1.8170	1.0260	238 290
533	右旋胺菊酯	27.637	15.213	26.842	1.8167	1.0296	221
534	硝虫硫磷	27.660	15.338	27.428	1.8034	1.0085	220
535	三氯吡氧乙酸 丁氧基乙酯	27.637	15.155	26.792	1.8236	1.0315	233 295
536	丁氟螨酯	27.706	15.162	26.813	1.8273	1.0333	220
537	乙氧氟草醚	27.710	15.230	26.850	1.8194	1.0320	276
538	酰胺唑	27.720	15.260	26.938	1.8165	1.0290	246
539	胺菊酯 II	27.732	15.217	26.893	1.8224	1.0312	222
540	吡丙醚	27.773	15.165	26.820	1.8314	1.0355	273
541	硫丹 I	27.805	15.240	26.962	1.8245	1.0313	214
542	氰氟虫腙	27.835	15.153	26.782	1.8369	1.0393	235 284
543	特丁硫磷	27.848	15.218	26.918	1.8299	1.0345	198
544	丁香菌酯	27.967	15.245	26.905	1.8345	1.0395	321
545	双硫脲	28.137	15.187	26.867	1.8527	1.0473	253
546	乳氟禾草灵	28.145	15.217	26.838	1.8496	1.0487	292
547	虱螨脲	28.185	15.138	26.752	1.8619	1.0536	257
548	解毒唑（解草 酯）	28.265	15.247	26.900	1.8538	1.0507	243
549	亚胺唑	28.308	15.335	27.300	1.8460	1.0369	246
550	大蒜素 III	28.420	15.427	27.202	1.8422	1.0448	210
551	噁草酮	28.482	15.187	26.857	1.8754	1.0605	206 294
552	大黄素甲醚	28.530	15.215	26.815	1.8751	1.0640	222 267
553	Es-生物烯丙 菊酯	28.653	15.173	26.828	1.8884	1.0680	228
554	丁草胺	28.655	15.242	26.957	1.8800	1.0630	198
555	富右旋烯丙菊 酯	28.660	15.228	26.857	1.8821	1.0671	228
556	右旋反式烯丙 菊酯	28.748	15.222	26.915	1.8886	1.0681	228
557	毒死蜱	28.760	15.153	26.792	1.8980	1.0735	290
558	丙烯菊酯	28.768	15.213	26.928	1.8910	1.0683	228
559	硫丹 II	28.858	15.240	26.962	1.8936	1.0703	214
560	溴螨酯	28.873	15.202	26.795	1.8993	1.0776	231
561	五氯硝基苯	28.977	15.242	26.962	1.9011	1.0747	212
562	噻螨酮	29.037	15.173	26.832	1.9137	1.0822	226

563	噻嗪酮	29.115	15.145	26.767	1.9224	1.0877	200 246
564	二甲戊灵	29.277	15.213	26.925	1.9245	1.0874	240
565	阿维菌素 B2a	29.337	15.180	26.833	1.9326	1.0933	245
566	四氟苯菊酯	29.342	15.192	26.872	1.9314	1.0919	272
567	盐酸吗啉胍	29.467	15.200	26.870	1.9386	1.0967	240
568	氟节胺	29.522	15.150	26.778	1.9486	1.1025	270
569	烯丙菊酯	29.650	15.382	27.490	1.9276	1.0786	228
570	桉油精	29.687	15.212	26.810	1.9516	1.1073	267
571	氟乐灵	29.842	15.217	26.930	1.9611	1.1081	275
572	异丙酯草醚	29.877	15.440	27.463	1.9350	1.0879	230 309
573	氟虫脲	30.317	15.167	26.845	1.9989	1.1293	254
574	乙螨唑	30.370	15.152	26.788	2.0044	1.1337	225 273
575	仲丁灵	30.445	15.200	26.862	2.0030	1.1334	236
576	氯氟醚菊酯	30.465	15.188	26.863	2.0059	1.1341	213 273
577	四氟醚菊酯	30.493	15.190	26.875	2.0074	1.1346	270
578	炔螨特	30.707	15.185	26.860	2.0222	1.1432	224
579	三氯杀螨醇	30.773	15.233	26.930	2.0202	1.1427	230
580	氯氟吡氧乙酸 异辛酯	31.063	15.160	26.805	2.0490	1.1589	211
581	氟草烟酯	31.092	15.217	26.838	2.0432	1.1585	210
582	唑螨酯	31.097	15.157	26.793	2.0517	1.1606	234 259
583	d-柠檬烯	31.412	15.223	27.230	2.0635	1.1536	194
584	双甲醚	31.887	15.185	26.862	2.0999	1.1871	288
585	双甲脒	31.895	15.208	26.878	2.0973	1.1867	288
586	丁醚脲	32.045	15.140	26.765	2.1166	1.1973	205 252
587	螺甲螨酯	32.078	15.153	26.788	2.1169	1.1975	220
588	四氟甲醚菊酯	32.162	15.190	26.868	2.1173	1.1970	210 273
589	甲氰菊酯	32.178	15.215	26.892	2.1149	1.1966	277
590	啶螨醚	32.180	15.190	26.790	2.1185	1.2012	216 264 298
591	大蒜素 IV	32.297	15.427	27.202	2.0935	1.1873	196
592	氟啶脲	32.370	15.172	26.832	2.1335	1.2064	211 258
593	高效氟氯氰菊 酯 I	32.567	15.192	26.867	2.1437	1.2122	270
594	氟氯氰菊酯 I	32.567	15.222	26.838	2.1395	1.2135	270
595	氯烯炔菊酯	32.680	15.208	26.935	2.1489	1.2133	199
596	氟氯氰菊酯 II	32.785	15.222	26.838	2.1538	1.2216	270
597	高效氟氯氰菊 酯 II	32.785	15.192	26.867	2.1580	1.2203	270
598	啶螨氰	32.825	15.197	26.817	2.1600	1.2240	293
599	甲氨基阿维菌 素苯甲酸盐	32.888	15.173	26.840	2.1675	1.2253	238

600	高效反式氯氰菊酯	32.890	15.217	26.857	2.1614	1.2246	277
601	高效氯氰菊酯 I	32.910	15.165	26.803	2.1701	1.2278	277
602	氟氯氰菊酯 III	32.952	15.222	26.838	2.1648	1.2278	270
603	螺螨酯	33.027	15.187	26.873	2.1747	1.2290	203
604	氯氰菊酯 I	33.060	15.215	26.923	2.1729	1.2279	277
605	氯氟氰菊酯	33.093	15.232	26.845	2.1726	1.2327	201 277
606	高效氯氟氰菊酯	33.100	15.162	26.788	2.1831	1.2356	277
607	吡螨灵	33.132	15.180	26.855	2.1826	1.2337	296
608	精高效氯氟菊酯 I	33.147	15.237	26.885	2.1754	1.2329	200 277
609	高效氯氰菊酯 II	33.170	15.165	26.803	2.1873	1.2375	277
610	顺式氯氰菊酯 I	33.205	15.228	26.872	2.1805	1.2357	203 277
611	右旋烯炔菊酯 I	33.233	15.370	27.457	2.1622	1.2104	199
612	氮酮	33.235	15.177	26.835	2.1898	1.2385	225
613	精高效氯氟菊酯 II	33.250	15.237	26.885	2.1822	1.2367	200 277
614	苯氰菊酯 I	33.290	15.195	26.820	2.1909	1.2412	277
615	zeta-氯氰菊酯 I	33.297	15.198	26.827	2.1909	1.2412	277
616	右旋苯氰菊酯 I	33.332	15.183	26.855	2.1954	1.2412	197 276
617	顺式氯氰菊酯 II	33.347	15.228	26.872	2.1898	1.2410	198 277
618	右旋苯醚氰菊酯 I	33.353	15.192	26.868	2.1954	1.2414	277
619	氯氰菊酯 II	33.363	15.215	26.923	2.1928	1.2392	277
620	zeta-氯氰菊酯 II	33.395	15.198	26.827	2.1973	1.2448	277
621	溴氰菊酯	33.420	15.222	26.903	2.1955	1.2422	195 275
622	乙唑螨腈	33.488	15.353	27.390	2.1812	1.2226	224 301
623	zeta-氯氰菊酯 III	33.527	15.198	26.827	2.2060	1.2497	277
624	单甲脒	33.538	15.235	26.945	2.2014	1.2447	198
625	S-氰戊菊酯	33.557	15.225	26.842	2.2041	1.2502	202 276
626	氰戊菊酯	33.648	15.218	26.895	2.2111	1.2511	195 276

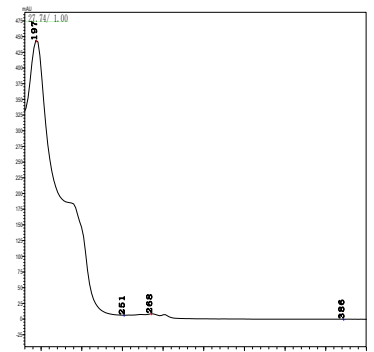
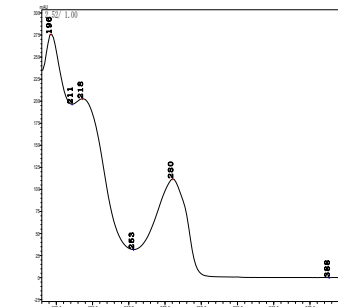
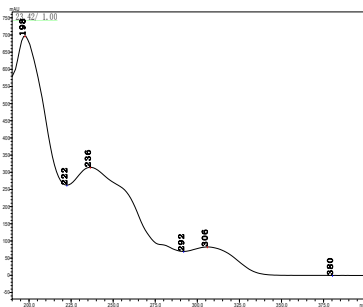
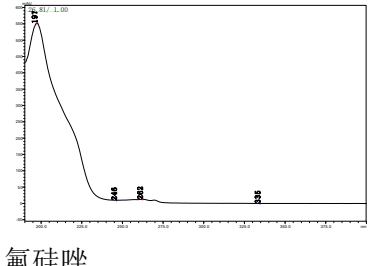
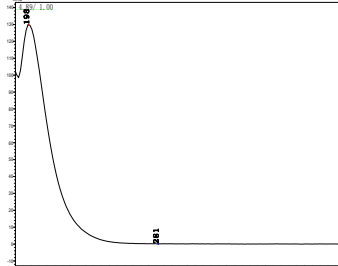
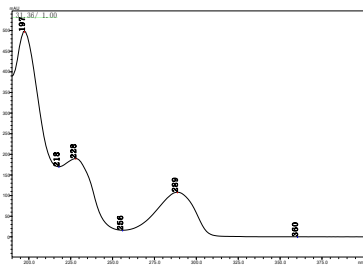
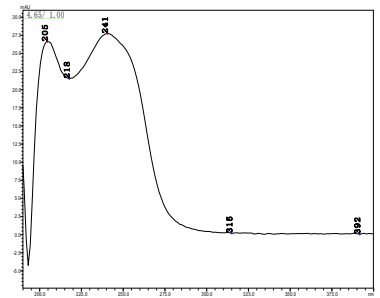
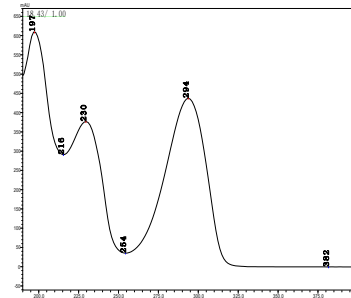
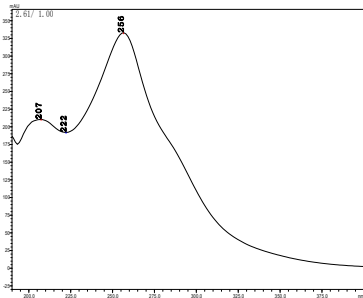
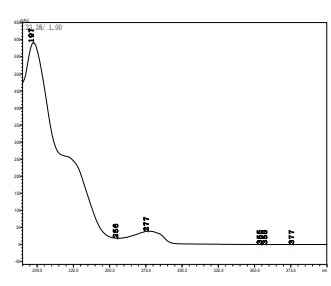
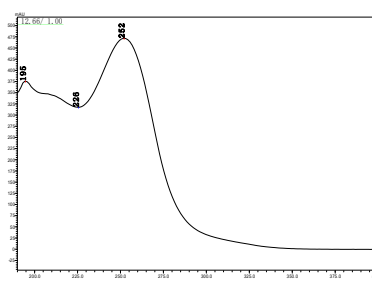
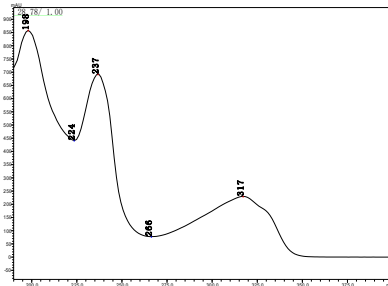
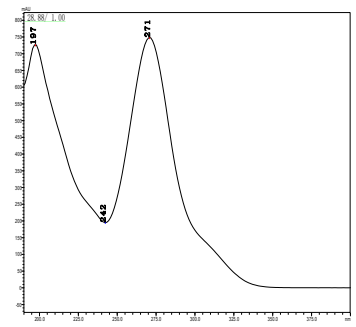
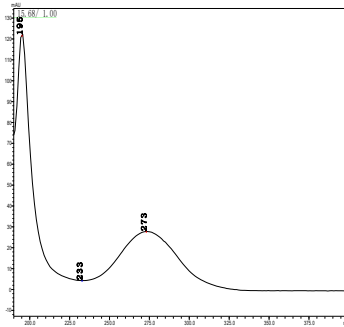
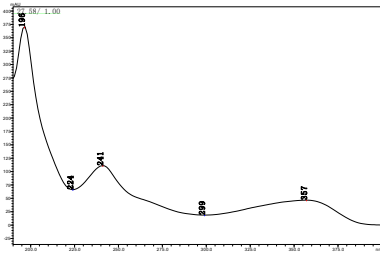
627	zeta-氯氰菊酯 IV	33.673	15.198	26.827	2.2156	1.2552	277
628	右旋烯炔菊酯 II	33.675	15.370	27.457	2.1910	1.2265	200
629	辛酰碘苯腈	33.722	15.202	26.823	2.2183	1.2572	227
630	苯氰菊酯 II	33.748	15.195	26.820	2.2210	1.2583	277
631	右旋苯氰菊酯 II	33.777	15.183	26.855	2.2247	1.2578	197 276
632	右旋苯醚氰菊酯 II	33.798	15.192	26.868	2.2247	1.2579	277
633	辛酰溴苯腈	33.805	15.183	26.858	2.2265	1.2587	213
634	硝苯菌酯	34.012	15.350	27.402	2.2158	1.2412	245
635	氯菊酯 I	34.113	15.217	26.890	2.2418	1.2686	200 274
636	阿维菌素	34.113	15.158	26.793	2.2505	1.2732	245
637	氟丙菊酯	34.170	15.648	27.553	2.1837	1.2402	232
638	苯醚菊酯 I	34.452	15.195	26.888	2.2673	1.2813	274
639	2, 4-D 异辛酯	34.543	15.190	26.868	2.2741	1.2857	229 285
640	醚菊酯	34.653	15.175	26.838	2.2836	1.2912	200 275
641	右旋苯醚菊酯	34.805	15.200	26.885	2.2898	1.2946	274
642	苯醚菊酯 II	34.810	15.195	26.888	2.2909	1.2946	274
643	氯菊酯 II	34.828	15.217	26.890	2.2888	1.2952	200 274
644	二甲四氯异辛酯	34.948	15.137	26.757	2.3088	1.3061	228 280
645	六氯苯	35.223	15.148	26.767	2.3253	1.3159	216
646	丁硫克百威	35.442	15.138	26.747	2.3413	1.3251	280
647	氟氯苯菊酯	35.563	15.220	26.852	2.3366	1.3244	268
648	松脂酸铜	35.693	15.158	26.803	2.3547	1.3317	240
649	联苯菊酯	35.883	15.183	26.857	2.3634	1.3361	203
650	苯丁锡	36.497	15.182	26.852	2.4040	1.3592	195
651	啶虫丙醚（三氯甲吡醚）	37.043	15.233	26.822	2.4318	1.3811	204 273
652	氟硅菊酯（硅醚菊酯）	38.730	15.175	26.773	2.5522	1.4466	229 271
653	伊维菌素	39.155	15.193	26.877	2.5772	1.4568	245
654	乙基多杀菌素 I	41.860	15.348	27.385	2.7274	1.5286	195
655	乙基多杀菌素 II	44.798	15.348	27.385	2.9188	1.6359	195

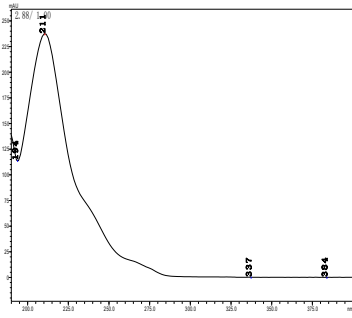
附录 3
农药成分—保留值信息数据库（仪器—赛默飞世尔）

序号	农药名称	农药成分与内标物保留时间 (min)		农药成分与内标物保 留值比	最大吸收波 长 (nm)
		农药成分保 留时间	邻苯二甲酸二 甲酯	农药成分与邻苯二甲 酸二甲酯保留值比	
1	盐酸吗啉胍	3.422	5.01	0.6830	236
2	链霉素	3.457	5.042	0.6856	200
3	井冈霉素 A	3.808	5.04	0.7556	200
4	单甲脒 I	3.818	5.008	0.7624	235
5	春雷霉素	3.838	5.028	0.7633	205
6	多抗霉素 B	3.945	5.053	0.7807	263
7	单甲脒 II	3.968	5.008	0.7923	235
8	百草枯	4.07	5.015	0.8116	258
9	丁酰肼	4.08	5.043	0.8090	200
10	氯溴异氰尿酸	4.227	5.063	0.8349	200
11	三乙膦酸铝	4.347	5.028	0.8646	
12	胺鲜酯柠檬酸盐	4.353	5.045	0.8628	200
13	霜霉威 I	4.557	5.045	0.9033	200
14	敌百虫	4.56	5.028	0.9069	200
15	甲维盐	4.592	5.007	0.9171	230 274
16	四聚乙醛	4.623	5.03	0.9191	200
17	杀虫环	4.657	5.043	0.9235	261
18	敌草快	4.7	5.068	0.9274	310
19	辛菌胺	4.72	5.023	0.9397	235
20	d-柠檬烯 II	4.86	4.992	0.9736	200
21	草甘膦	4.878	5.007	0.9742	200
22	草铵膦	4.907	5.025	0.9765	200
23	精草铵膦	5.002	4.962	1.0081	200
24	矮壮素	5.135	5.042	1.0184	200
25	甲哌鎓	5.14	5.028	1.0223	200
26	霜霉威 II	5.208	5.045	1.0323	200
27	2 甲 4 氯	5.313	5.003	1.0620	226 279
28	杀虫单	5.355	5.035	1.0636	243
29	灭蚁灵	5.378	5.012	1.0730	212 264
30	杀虫双	5.382	5.023	1.0715	243
31	胺鲜酯	5.385	5.032	1.0702	206
32	苯丁锡	5.39	5.015	1.0748	212 264
33	氟虫胺	5.427	5.017	1.0817	264
34	甲基咪草烟	5.497	5.048	1.0889	251
35	苦参碱	5.637	5.008	1.1256	200

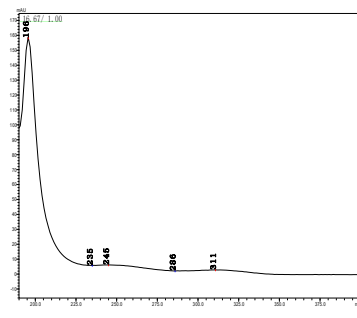
36	三苯基乙酸锡	5.695	5.032	1.1318	220
37	治螟磷	5.723	5.022	1.1396	204
38	异乐果	6.013	5.05	1.1907	200
39	二氯吡啶酸	6.522	5.028	1.2971	222 281
40	d-柠檬烯 II	8.68	4.992	1.7388	200
41	氟蚁腓 I	17.302	5.028	3.4411	227 299
42	氟蚁腓 II	28.885	5.028	5.7448	227 299

附录 4 农药成分紫外光谱图

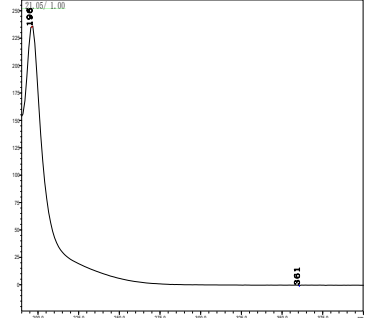




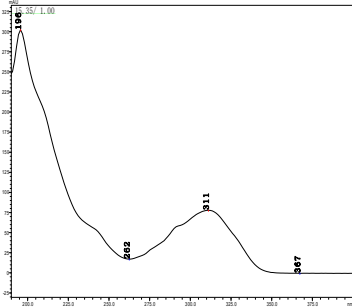
氯氟吡氧乙酸 (氟草定)



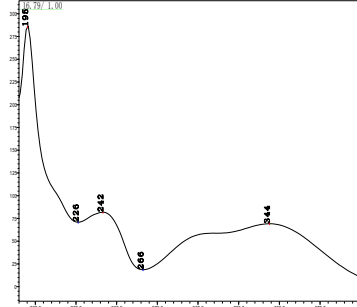
溴敌隆



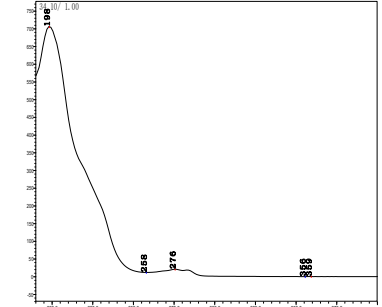
二溴磷



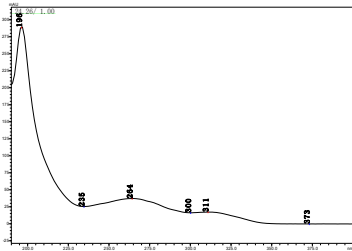
杀鼠醚



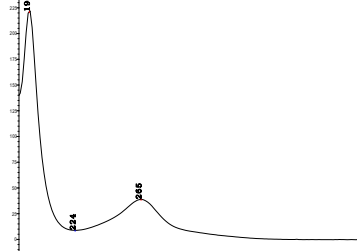
复硝酚钠



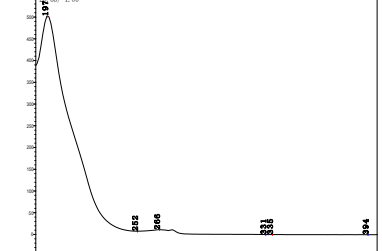
丙溴磷



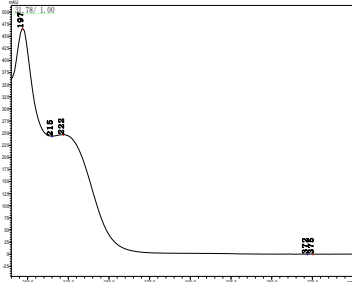
杀鼠灵 (溴鼠灵)



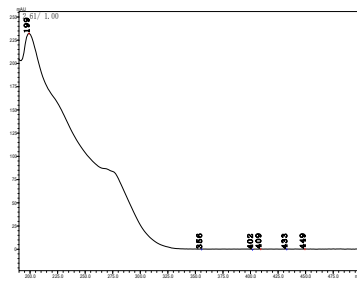
赛克



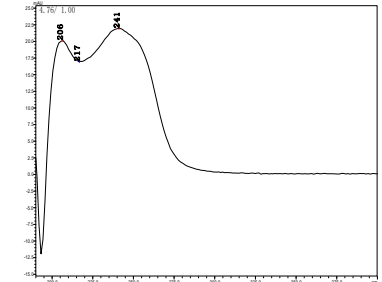
瑞毒霉



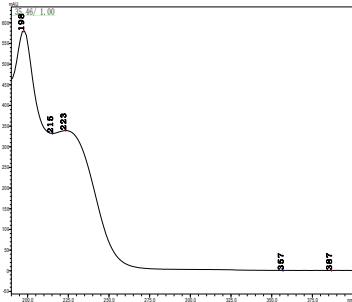
炔丙菊酯



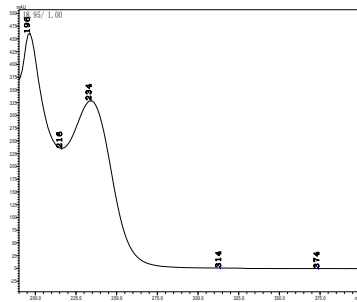
普施特



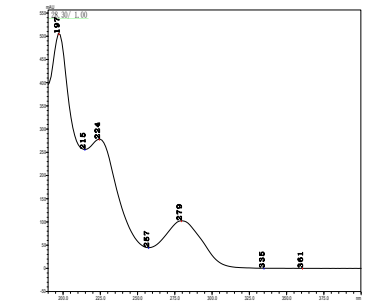
宝成 (玉嘧磺隆)



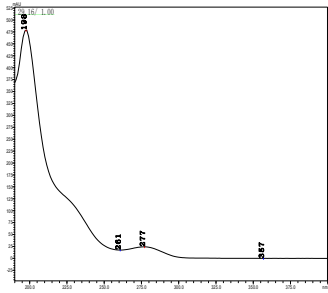
丙烯菊酯



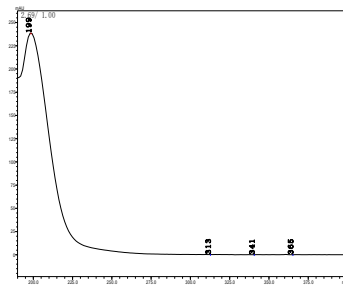
拉维因



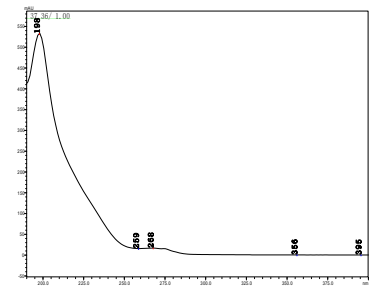
炔草酯



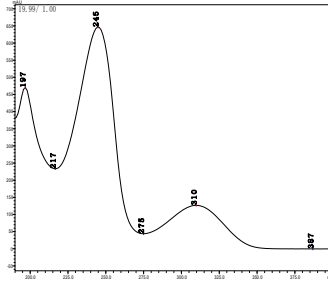
甲基异柳磷



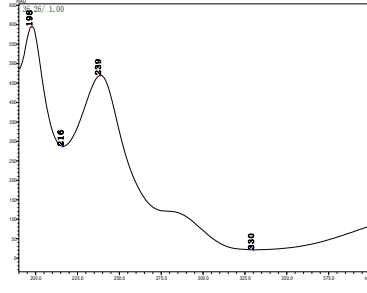
丙烯酸



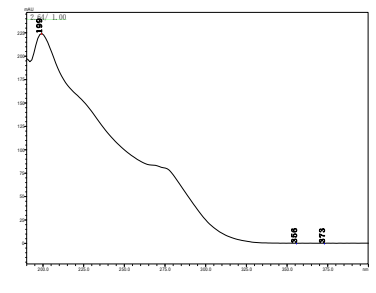
高效氟氯氰菊酯



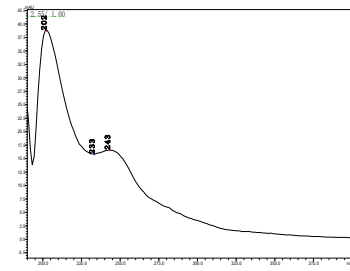
抗蚜威



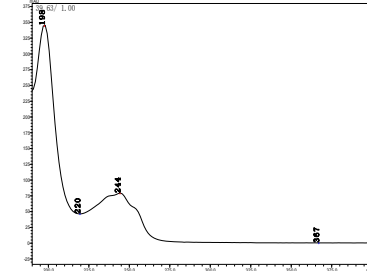
二甲戊灵



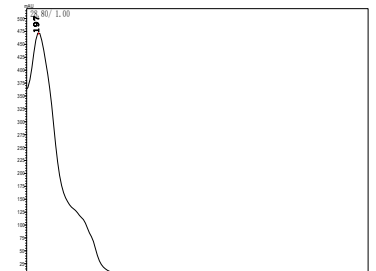
咪唑乙烟酸



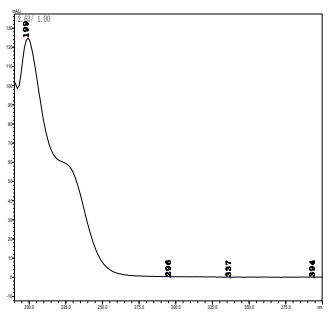
皂素



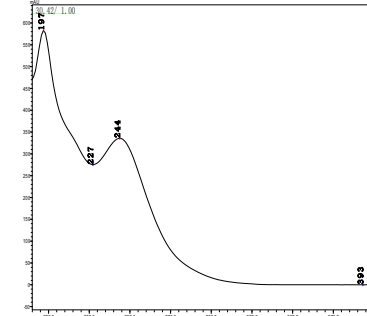
伊维菌素



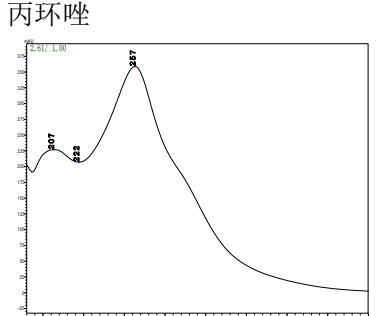
丙环唑



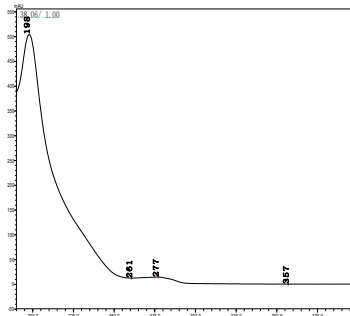
三磷锡



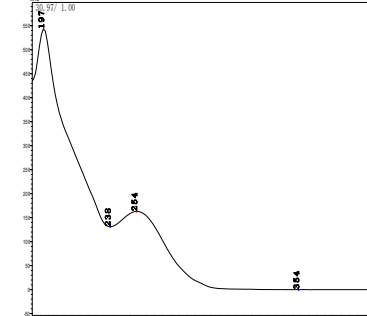
氯氟吡啶酸



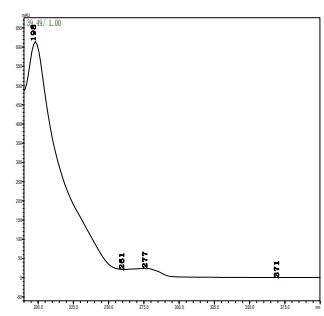
磺草酮



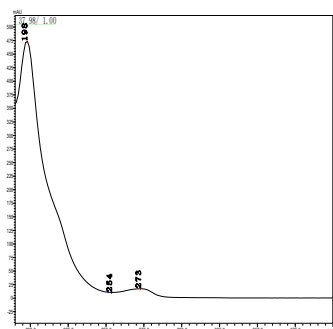
氯氰菊酯



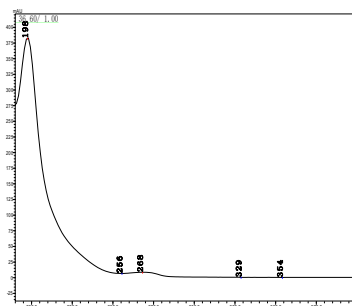
氟铃脲



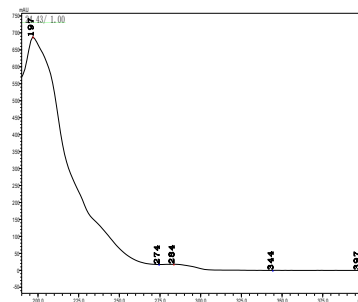
右旋苯醚氰菊酯



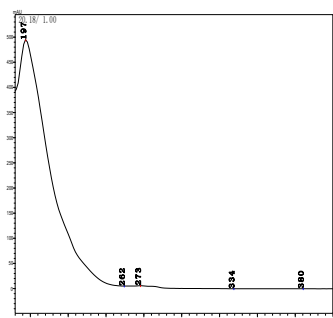
四氟甲醚菊酯



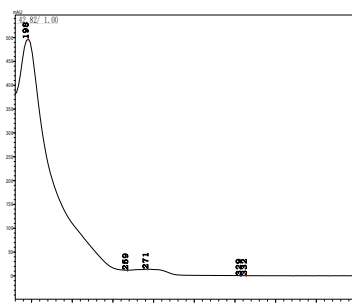
四氟醚菊酯



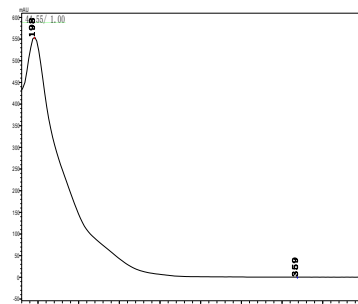
戊炔草胺



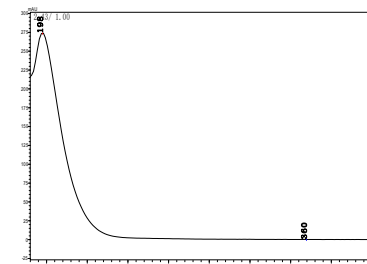
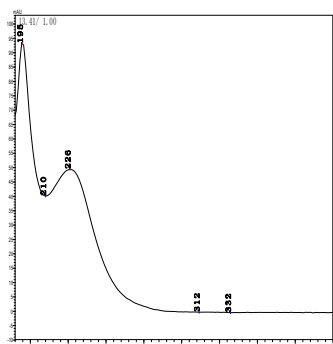
菌核净



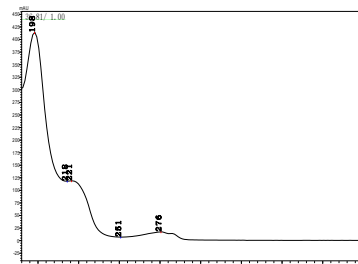
苯醚菊酯



联苯菊酯

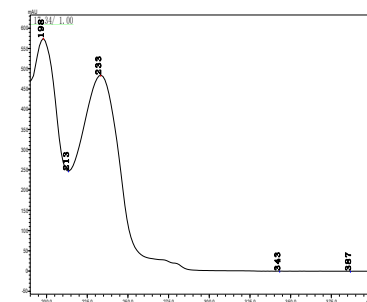
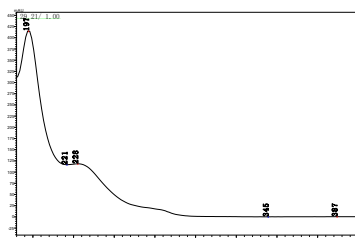


双丙胺磷钠

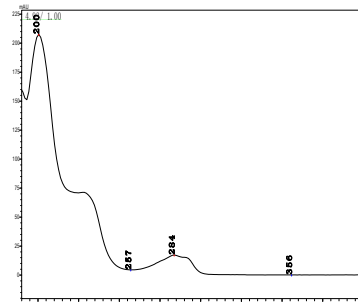


炔螨特

胺苯磺隆

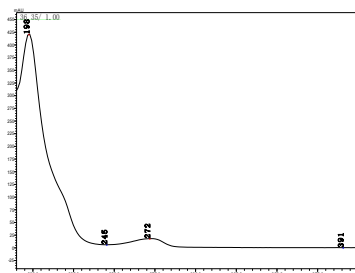


卡草胺

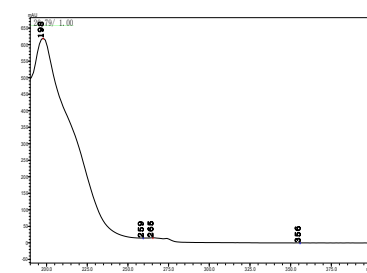


2,4-D 二甲胺

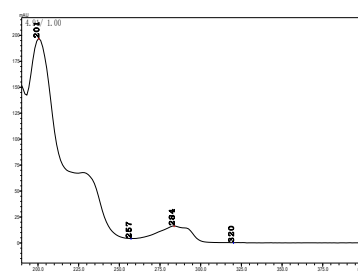
噁唑菌酮



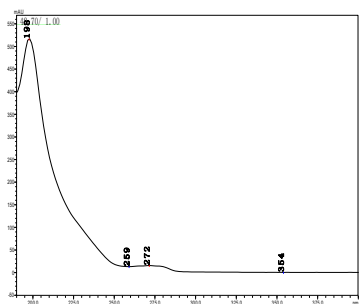
四氟苯菊酯



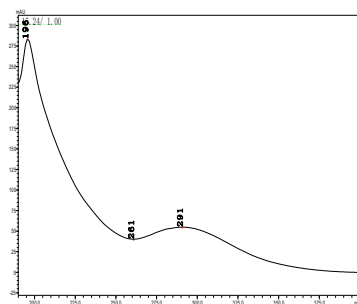
吡草胺



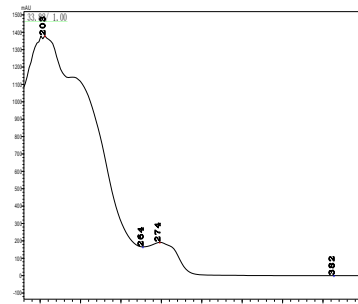
2,4-D 钠



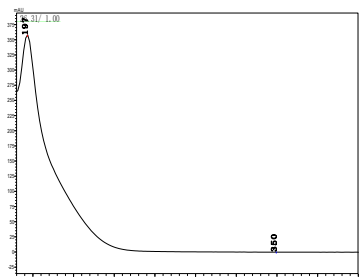
右旋苯醚菊酯



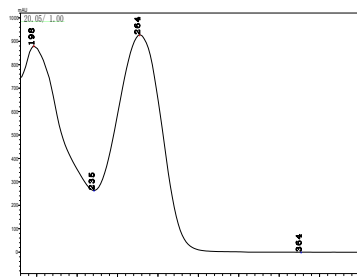
三氟羧草醚



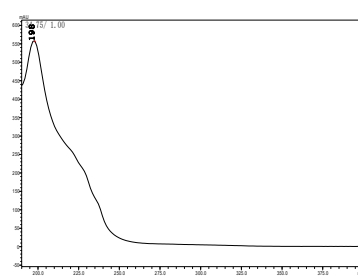
氰戊菊酯



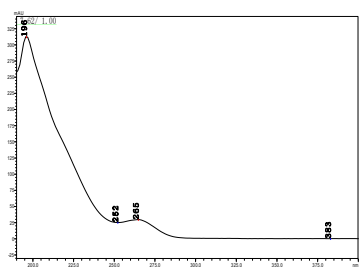
呋咪菊酯



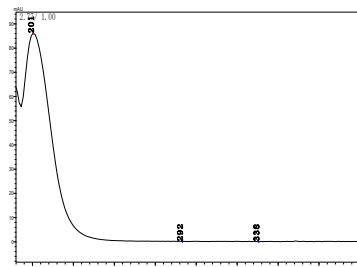
氯吡脞



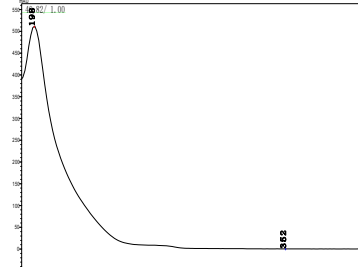
胺菊酯



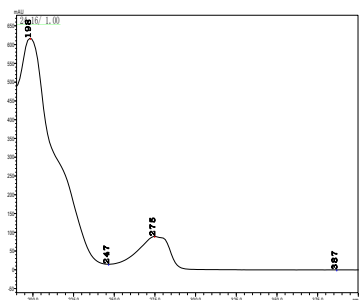
2,6-二氯酰胺



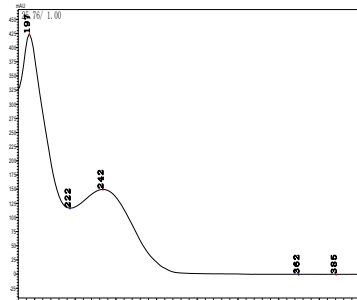
赤霉素(酸)



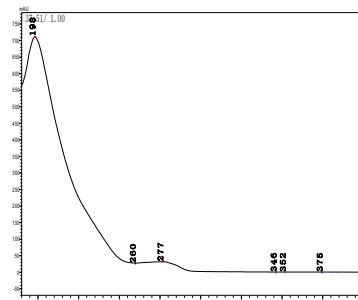
氯菊酯



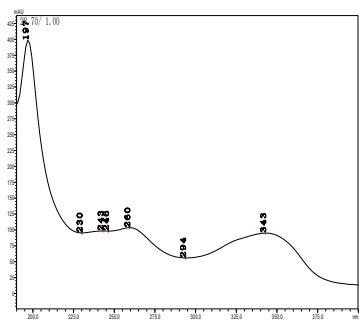
香芹酚



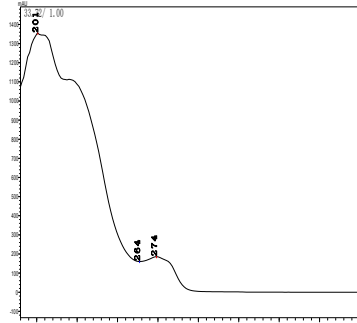
三唑磷



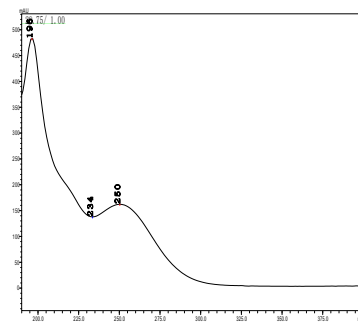
甲氰菊酯



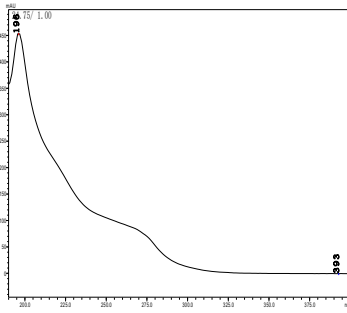
氟啶胺



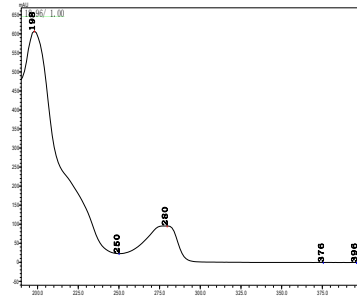
溴氰菊酯



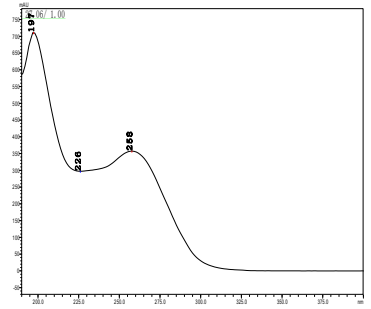
烯唑醇



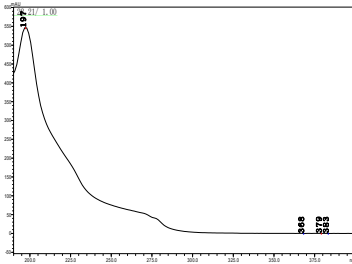
SP-2



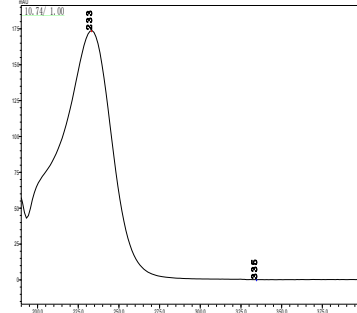
克百威



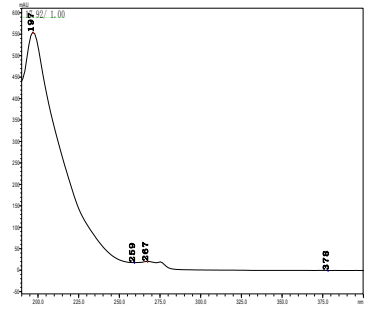
除虫脲



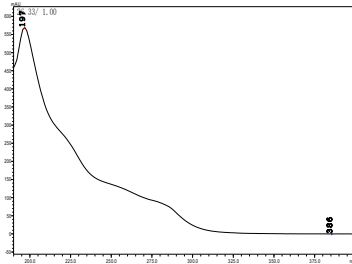
醚菊酯



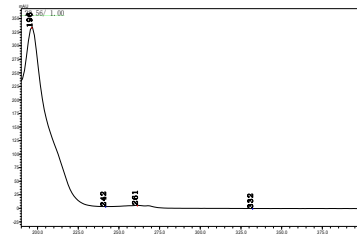
灭多威



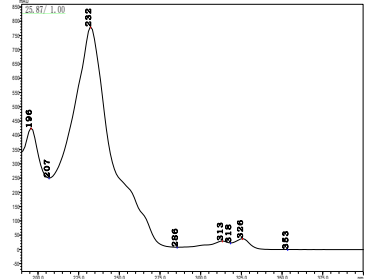
噁霜灵



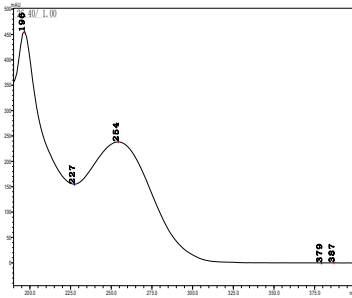
四氟虫酰胺



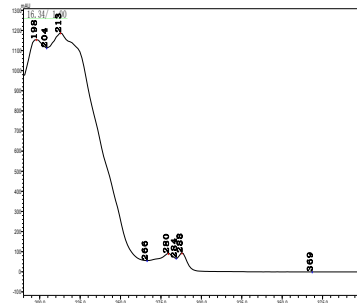
仲丁威



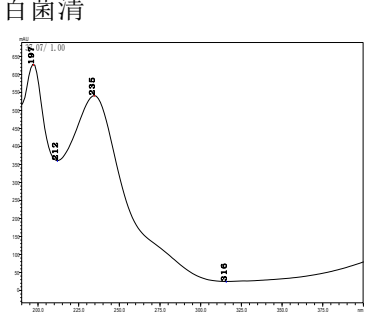
百菌清



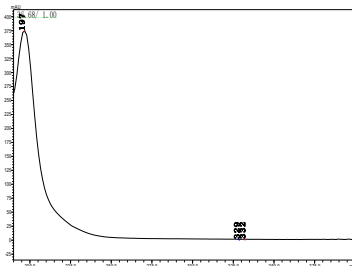
烯效唑



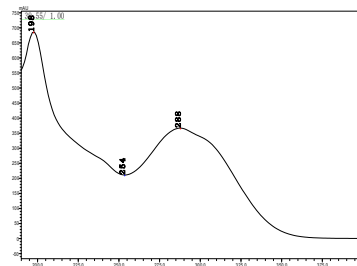
三环唑



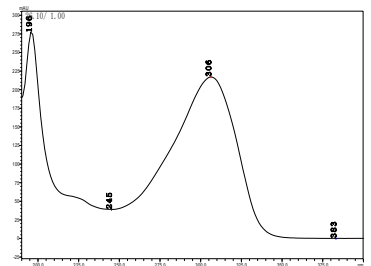
仲丁灵 (地乐胺)



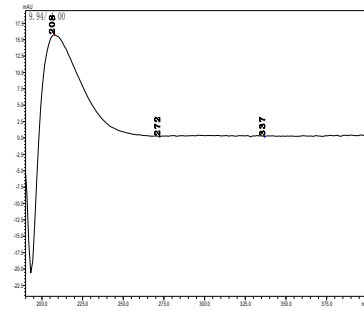
硫丹



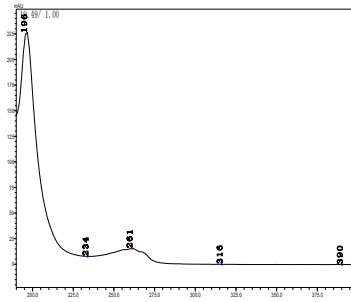
双甲脒



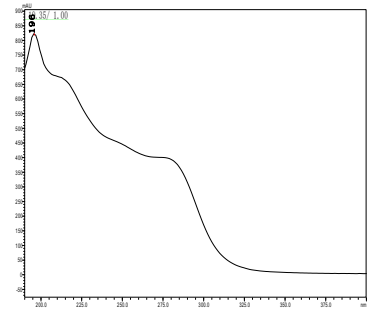
稻瘟灵



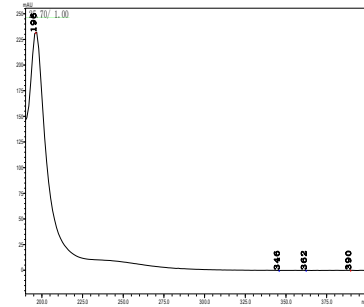
杀螟丹



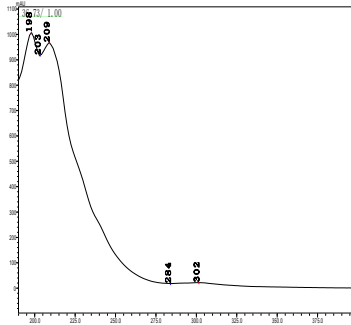
烟碱



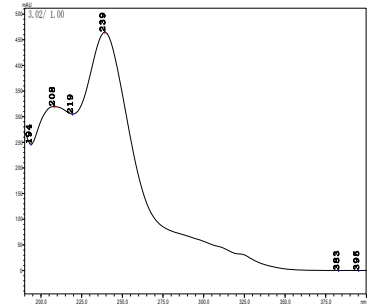
福美双



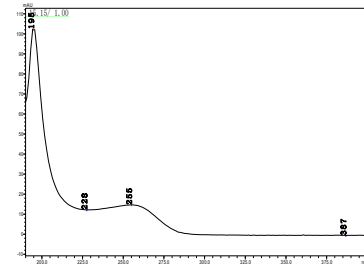
单甲脒



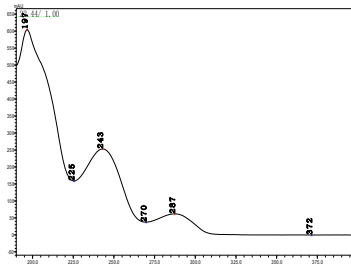
五氯硝基苯



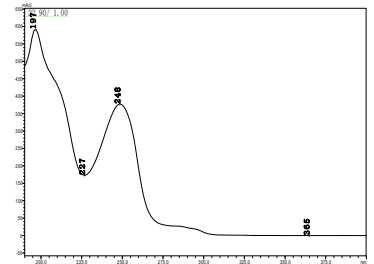
灭草啶



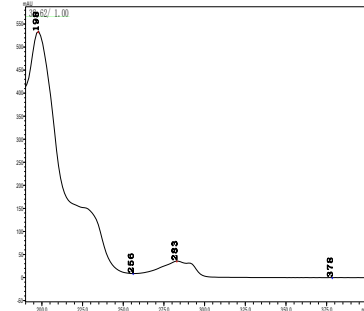
苯磺隆



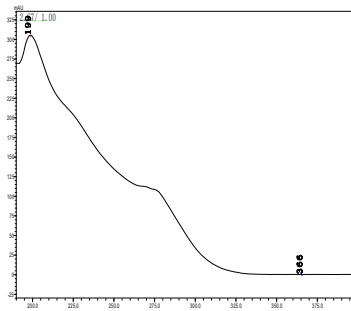
乙霉威



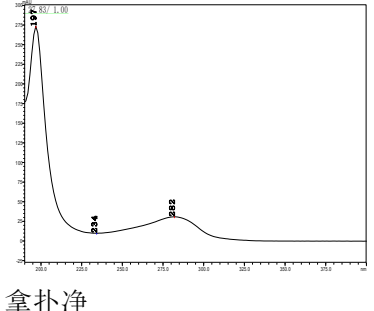
利谷隆



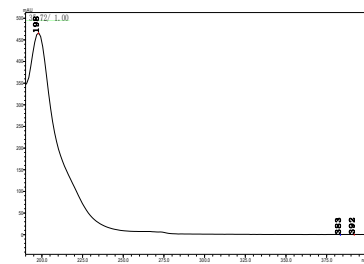
2,4-D 丁酯



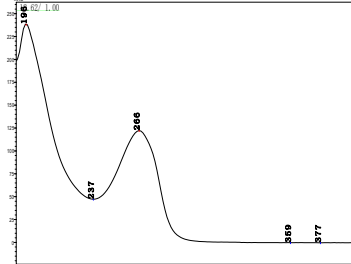
咪草烟



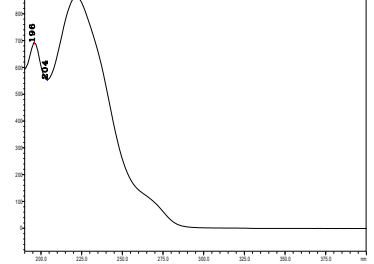
拿扑净



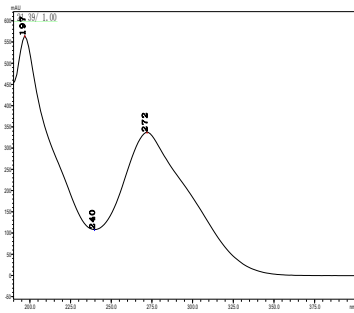
丁草胺



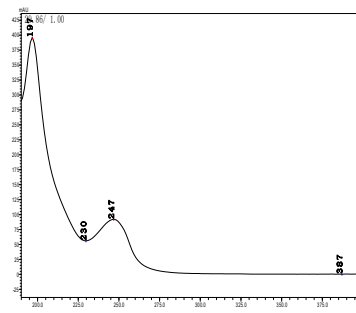
氟啶虫酰胺



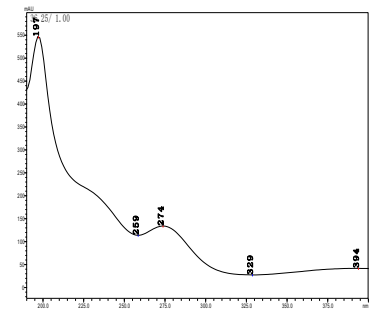
扑草净



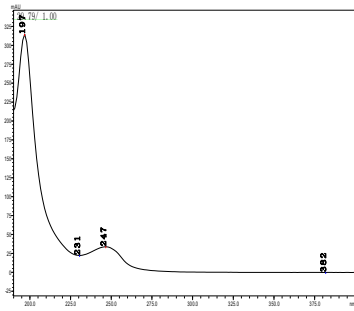
哒优麦



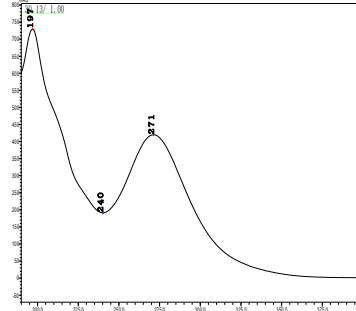
二嗪农



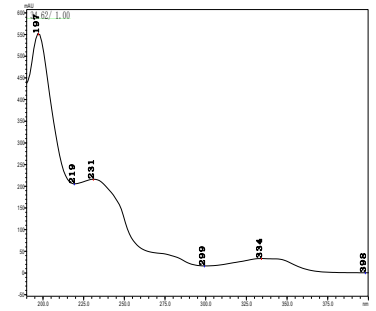
氟乐灵



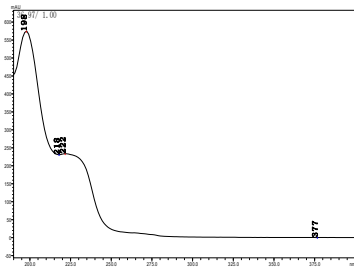
二嗪磷



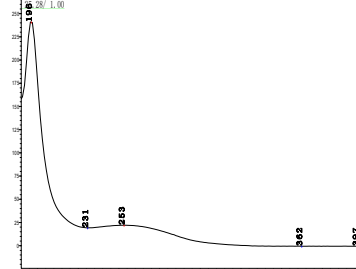
四螨嗪



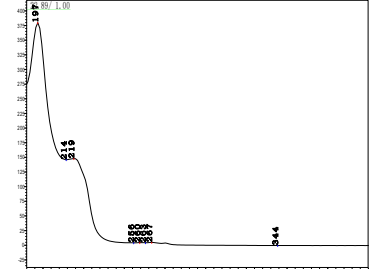
禾草克



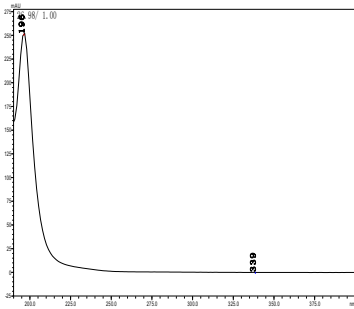
三氯杀螨醇



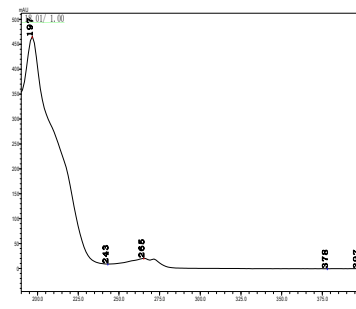
杀虫脒



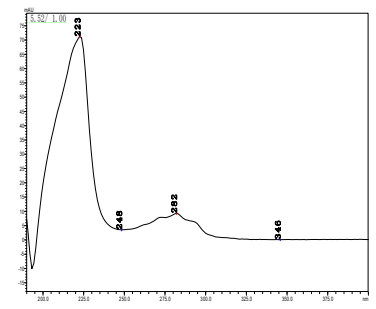
多效唑



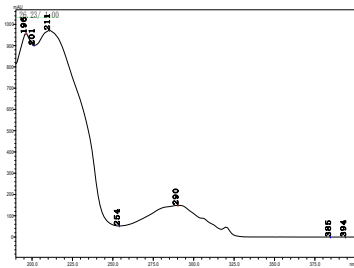
八氯二丙醚



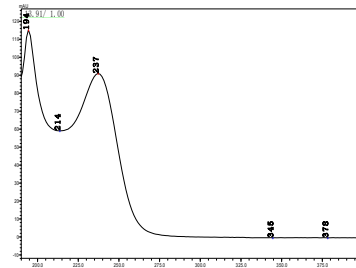
灭蚜威



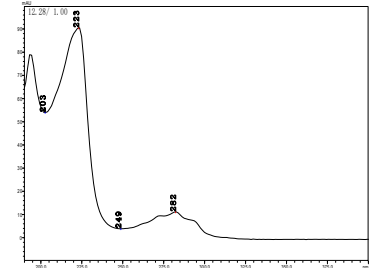
α -萘乙酸 I



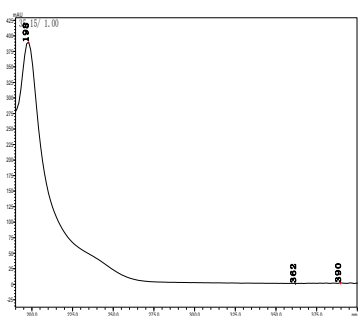
敌草胺



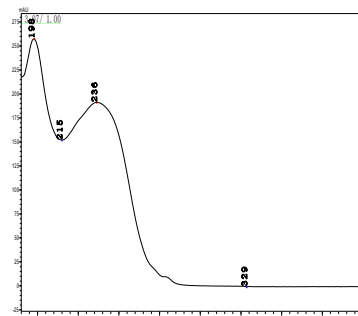
盐酸吗啉胍



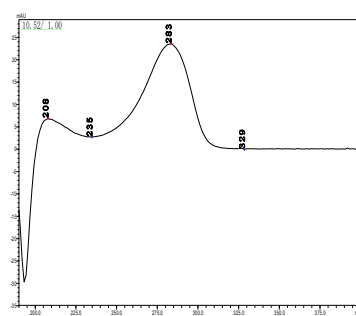
α -萘乙酸 II



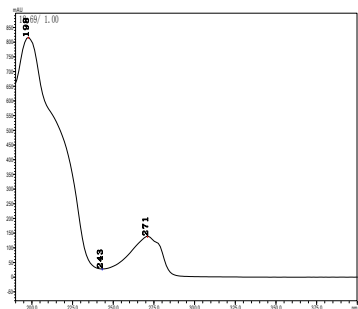
特丁硫磷



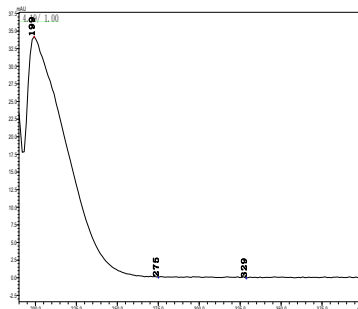
氯磺隆



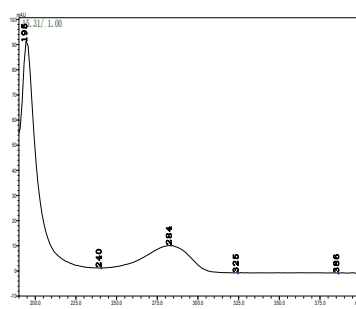
烯草酮锂盐 I



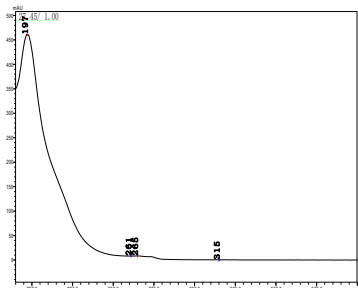
残杀威



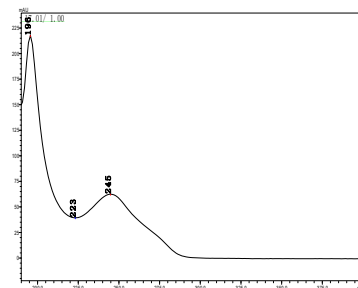
乙酰甲胺磷



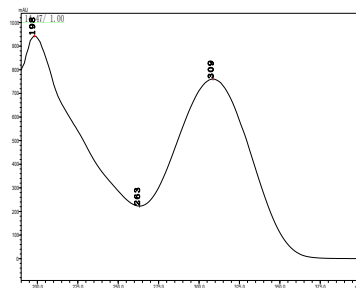
烯草酮锂盐 II



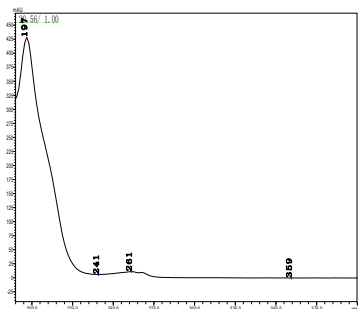
甲草胺



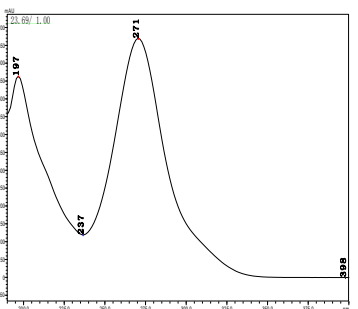
氯嘧磺隆



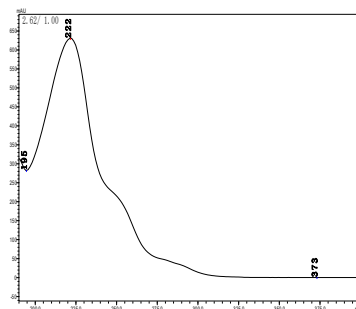
苯嗪草酮



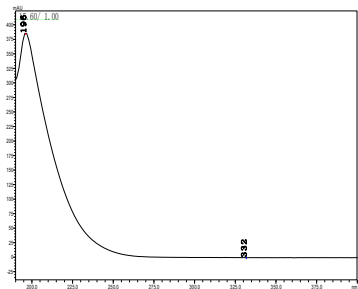
异丙威



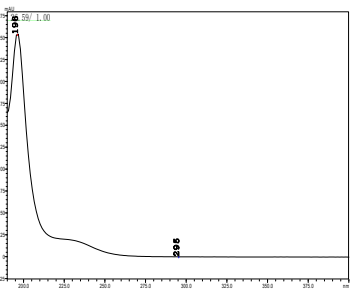
嘧霉胺



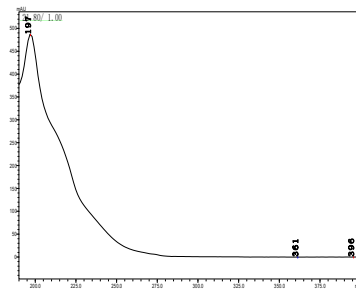
氨基吡啶酸



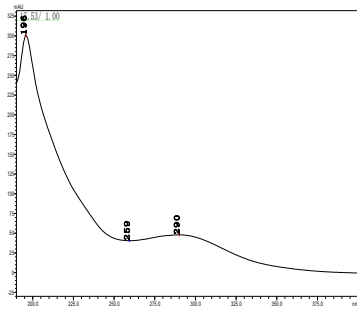
乐果



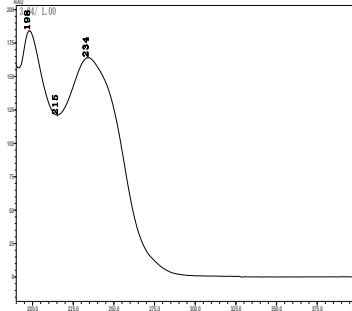
灭线磷



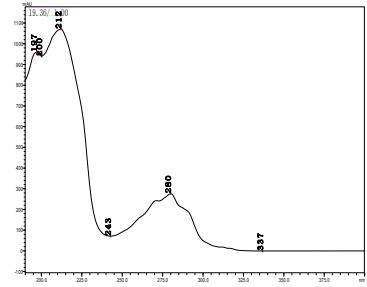
异噁草松



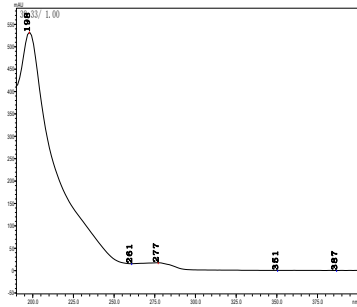
氟磺胺草醚



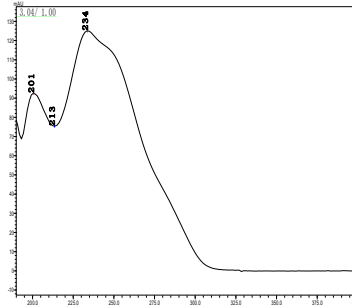
甲磺隆



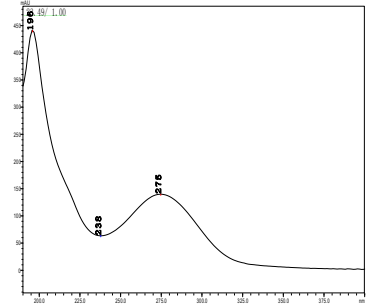
甲萘威



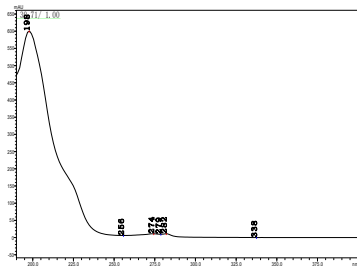
右旋苯氧菊酯



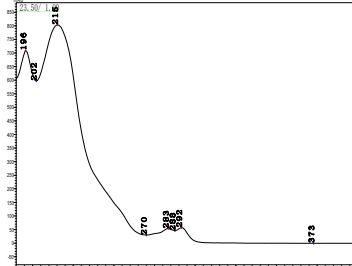
噻磺隆



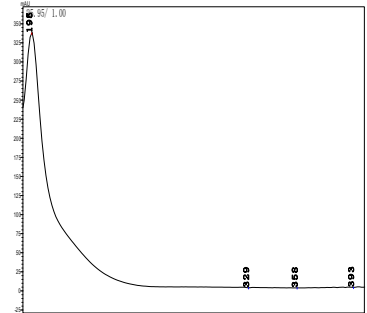
甲基对硫磷



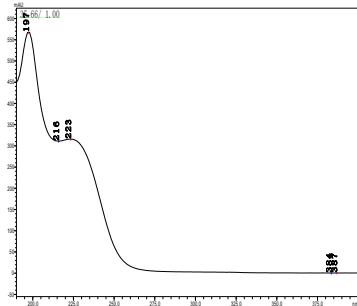
甲基立枯磷



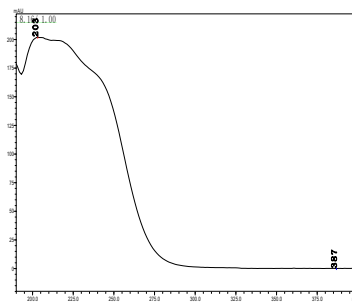
草除灵



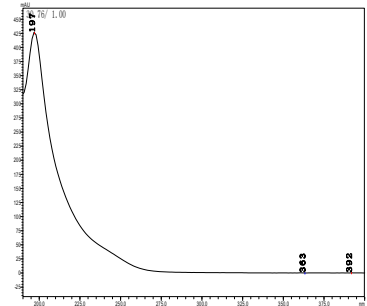
马拉硫磷



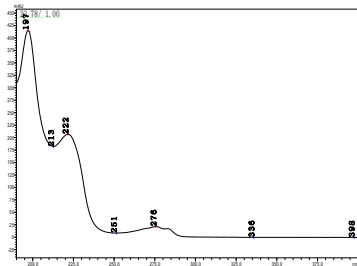
右旋反式烯丙菊酯



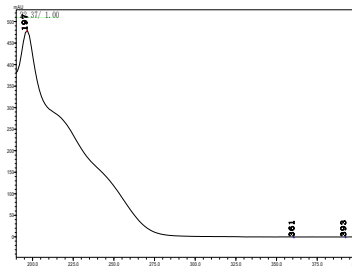
杀线威



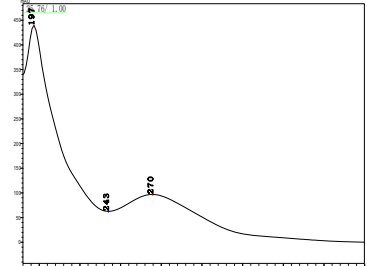
甲拌磷



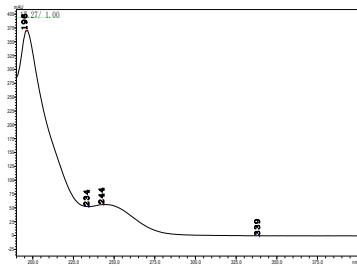
三唑醇



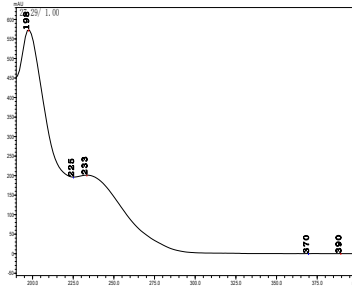
杀扑磷



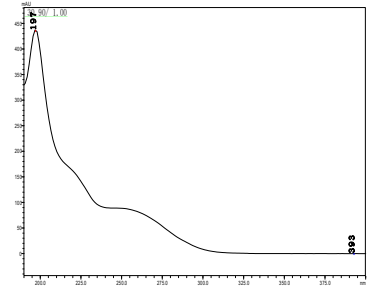
杀螟硫磷



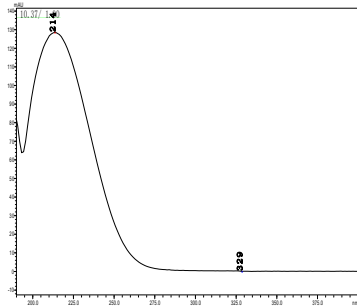
涕灭威



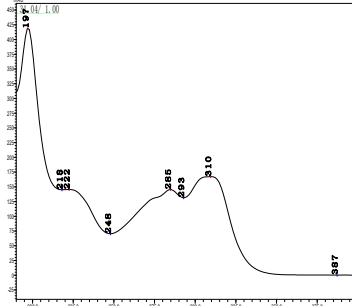
虫酰肼



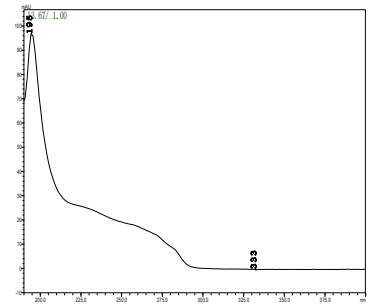
吡唑萘菌胺



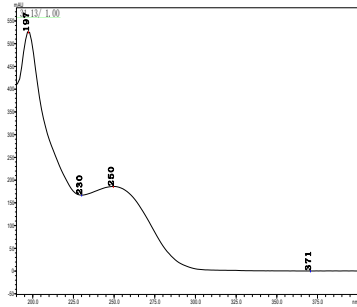
久效磷



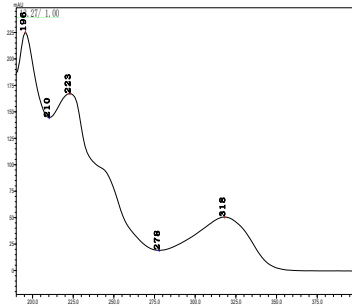
茚虫威



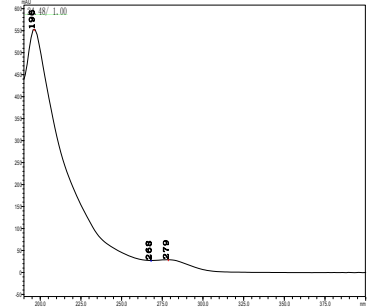
双氟磺草胺



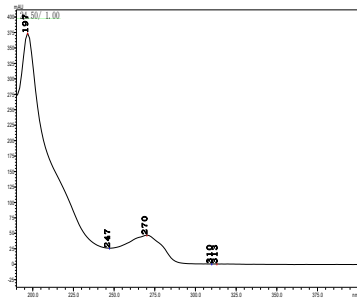
肟菌酯



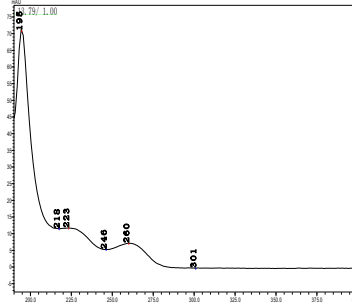
噻霉酮



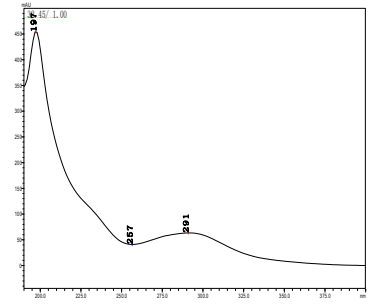
甲氧虫酰肼



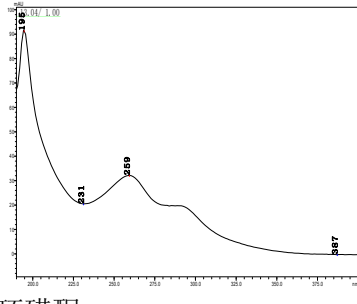
氟吡菌酰胺



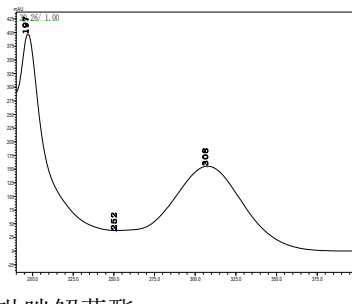
甲基二磺隆



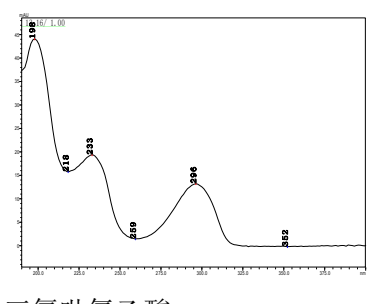
甲氧虫酰肼



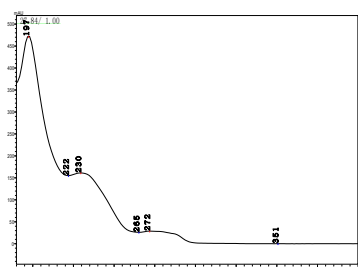
环磺酮



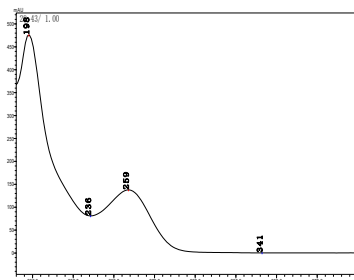
吡啶解草酯



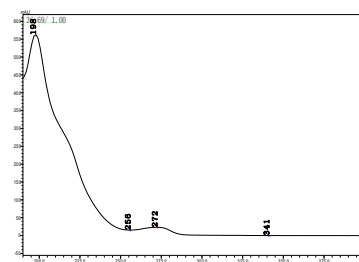
三氯吡氧乙酸



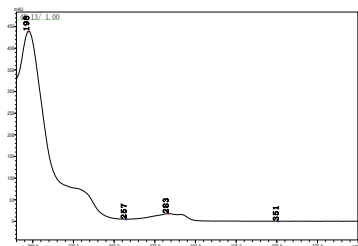
氯氟醚菊酯



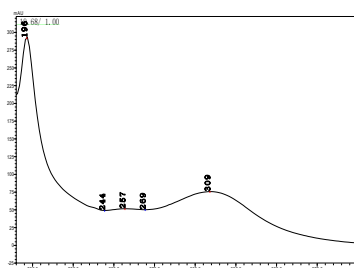
啉啉草酯



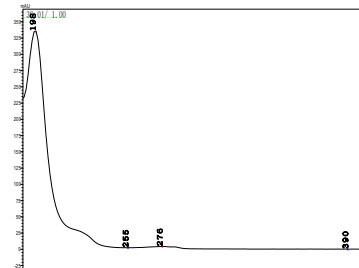
氯氟醚菊酯



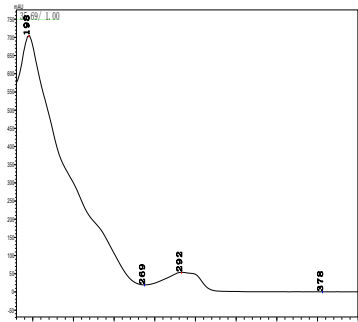
2,4-D 异辛酯



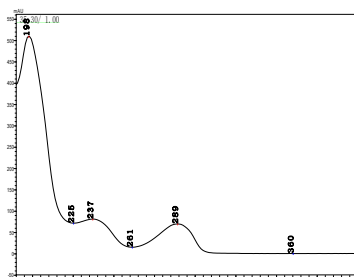
呋苯硫脲



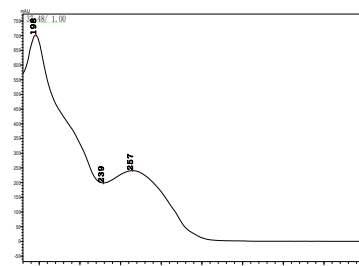
氮酮



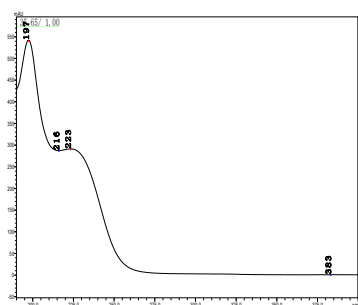
啉草酮



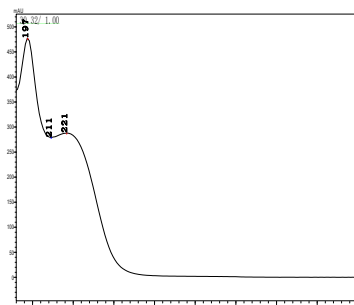
增效醚



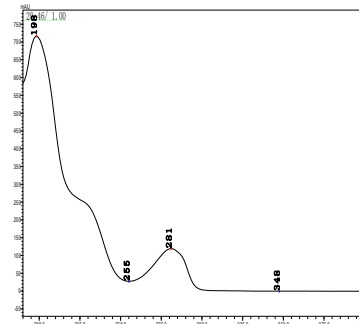
氟啉脲



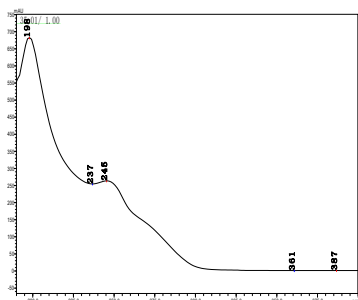
ES-生物烯丙菊酯



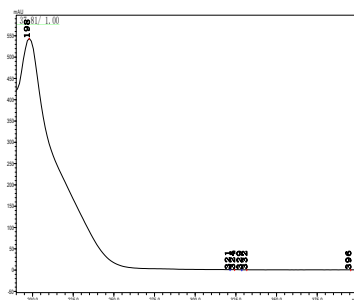
氯丙炔菊酯



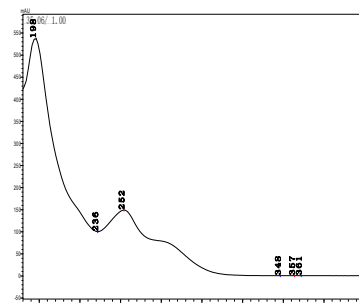
丁子香酚



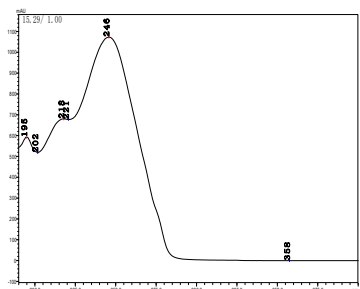
啉啉草醚



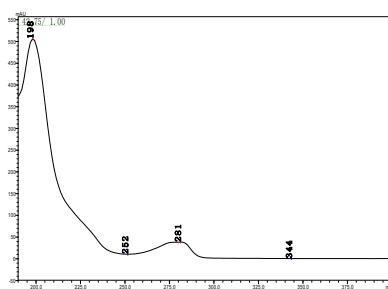
氯烯炔菊酯



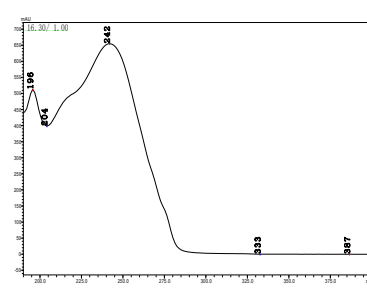
双硫磷



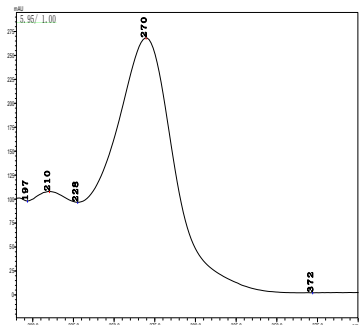
啉虫脒



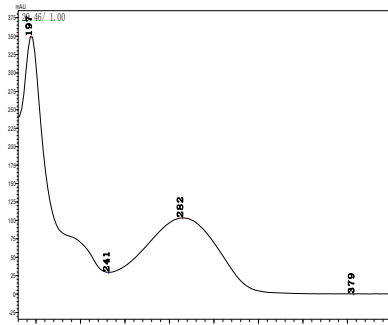
丁硫克百威



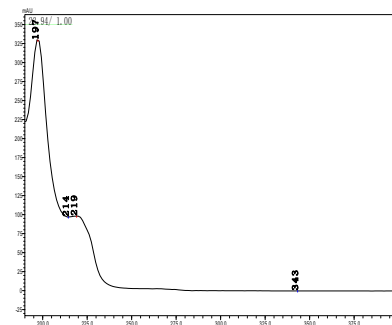
噻虫啉



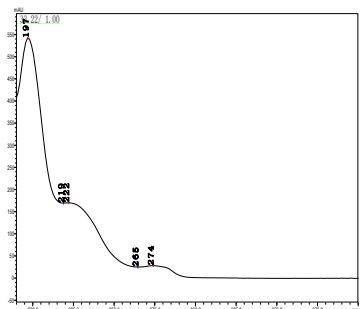
呋虫胺



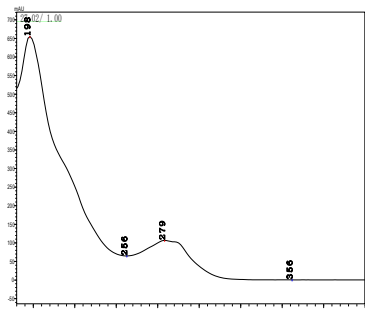
辛硫磷



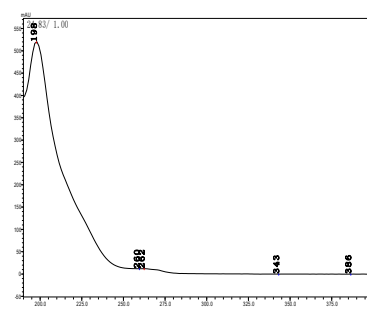
腈菌唑



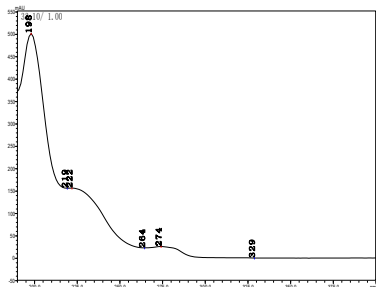
鱼藤酮



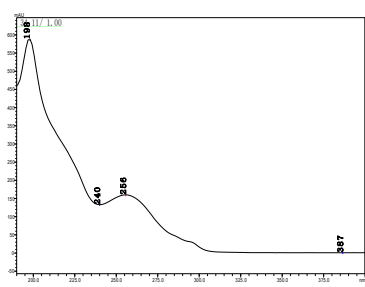
氟虫腈



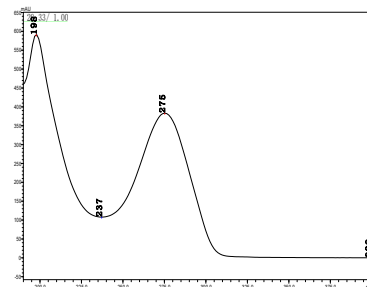
氟环唑



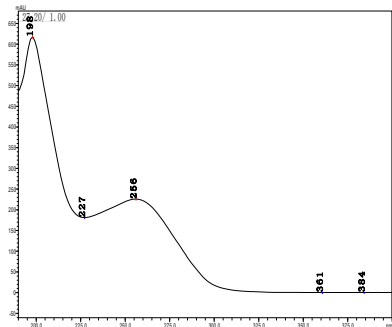
噻虫胺



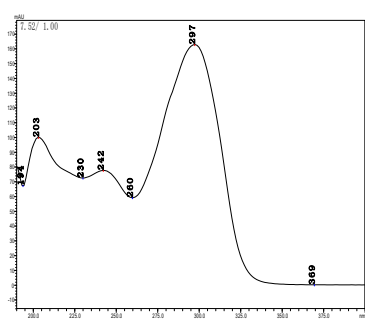
虱螨脲



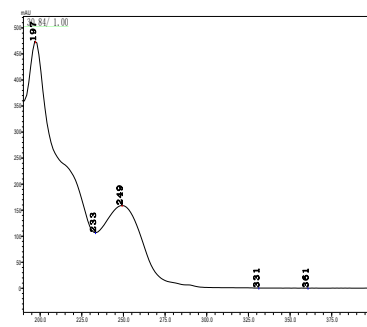
吡啶啉



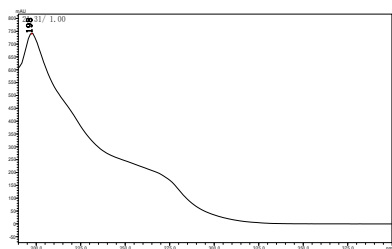
灭幼脲



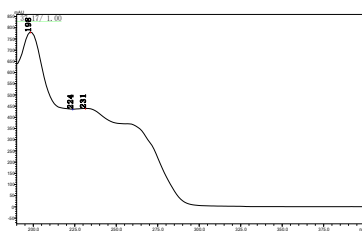
吡蚜酮



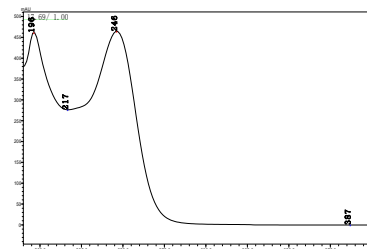
异菌脲



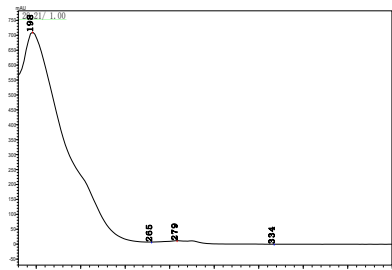
氯虫苯甲酰胺



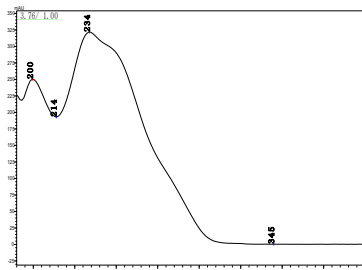
啉啉酯



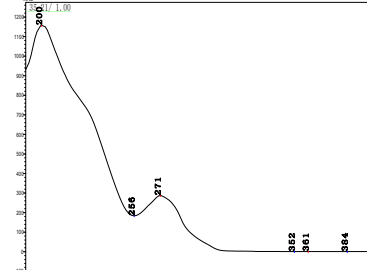
环啉酮



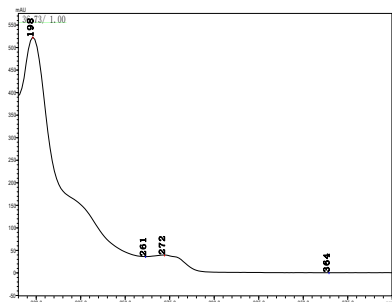
咪啉胺



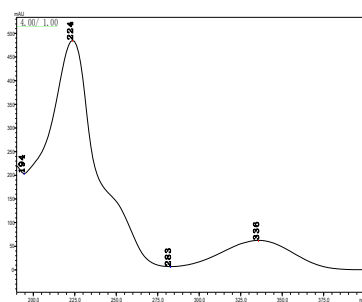
啉啉磺隆



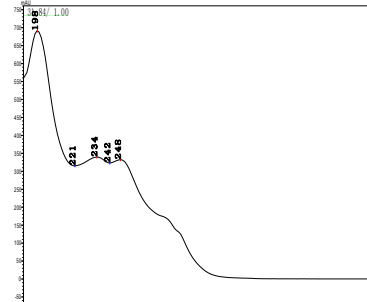
吡丙啉



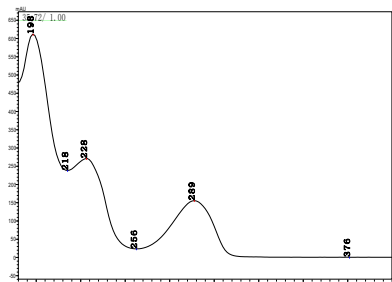
乙啉啉



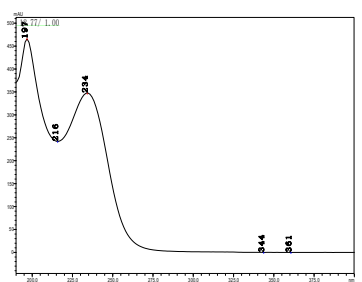
灭草松



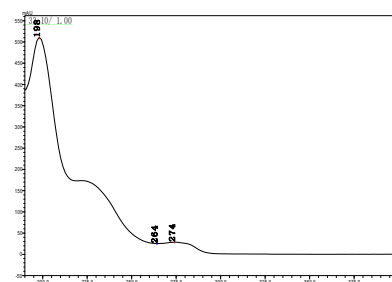
氰氟草啉



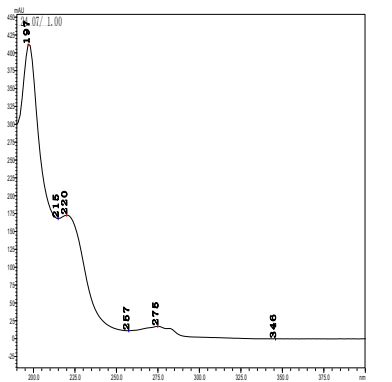
毒死蜱



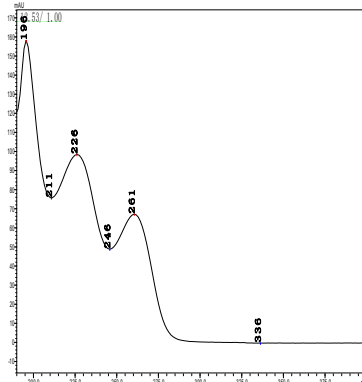
硫双威



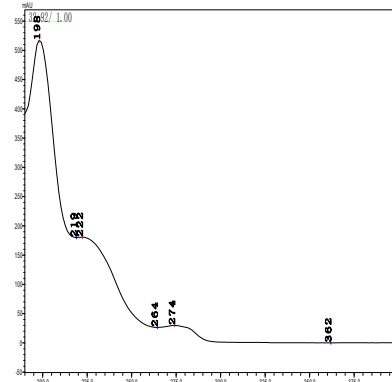
丁氟啉酯



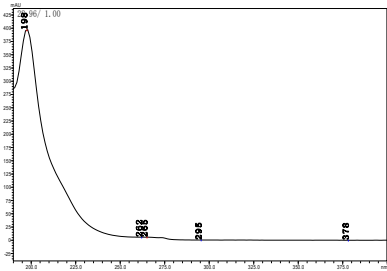
三啉酮



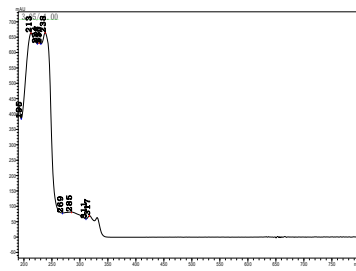
苄啉磺隆



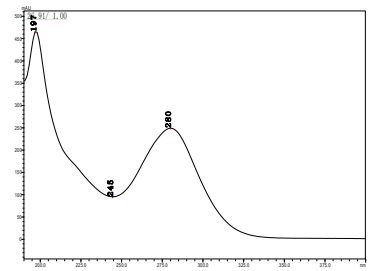
啉虫啉酰胺



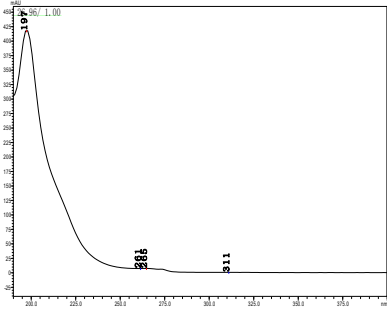
异丙草胺



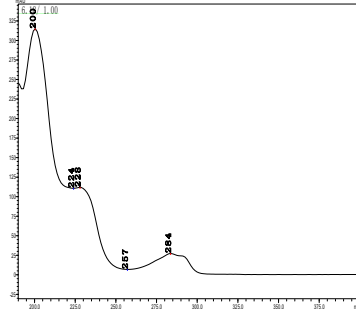
二氯喹啉酸



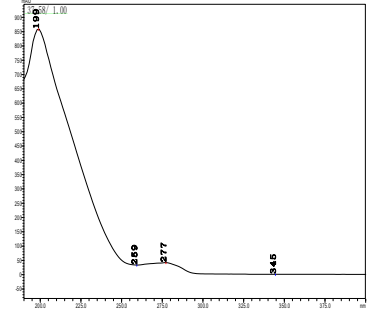
氰霜唑



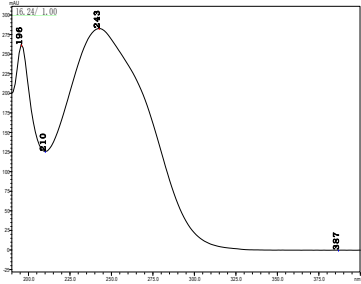
乙草胺



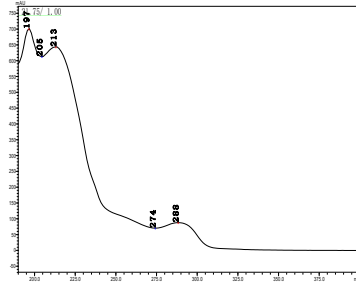
2,4-滴



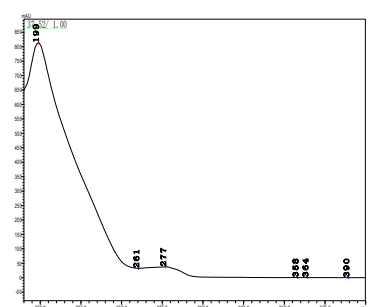
高效氯氟氰菊酯



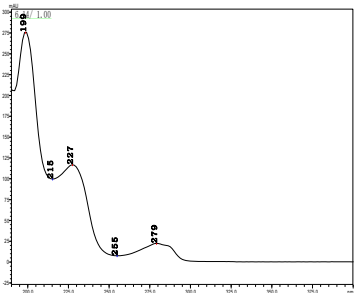
霜脲氰



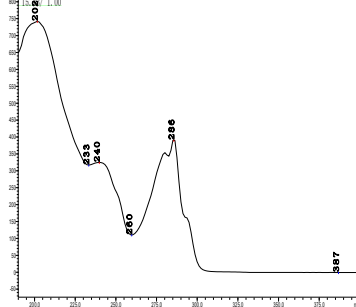
丙炔氟草胺



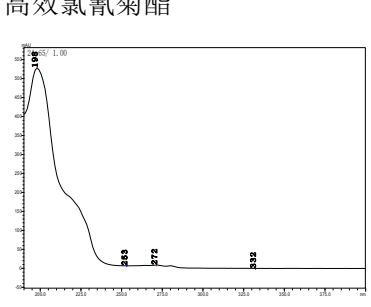
高效氯氟菊酯



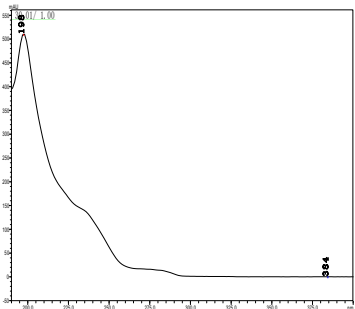
二甲四氯



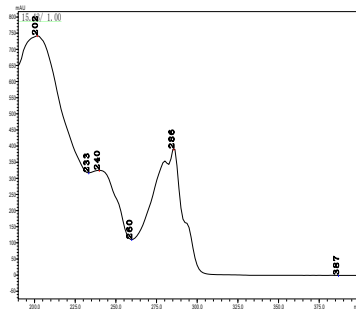
多菌灵



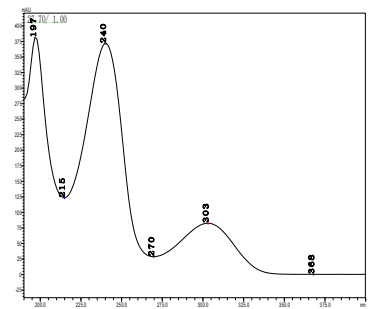
四氟醚唑 (Tetrafluoromethyl etherazole)



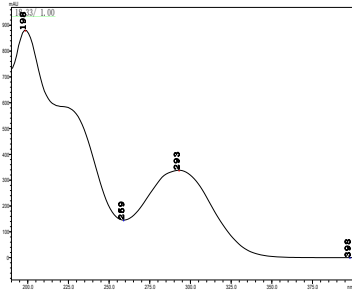
苯醚甲环唑



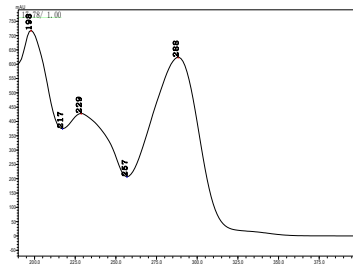
烯酰吗啉



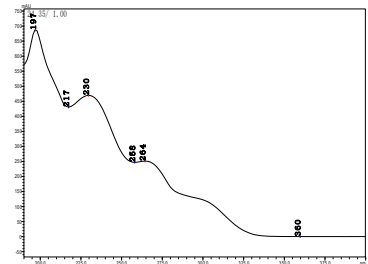
乙嘧酚磺酸酯



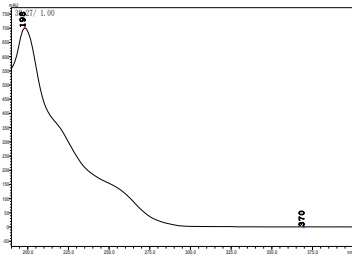
啉草酮



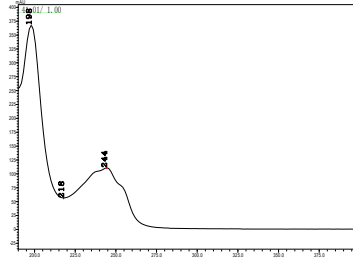
噻苯隆



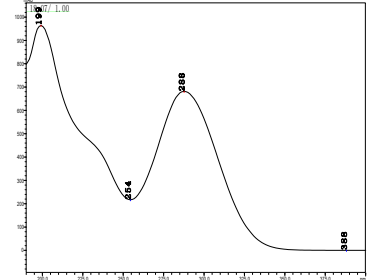
联苯肼酯



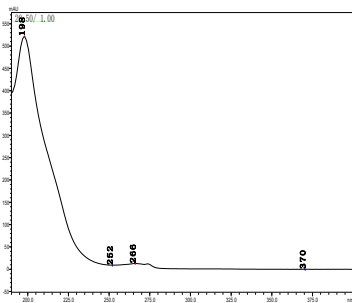
螺螨酯



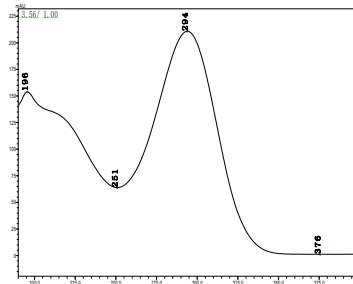
阿维菌素



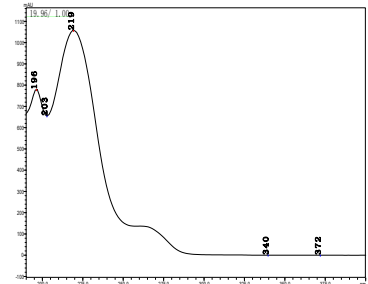
氰烯菌酯



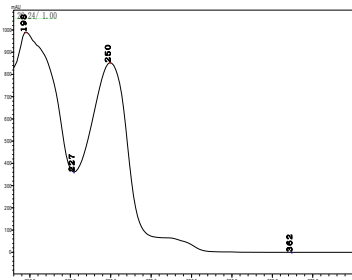
甲霜灵



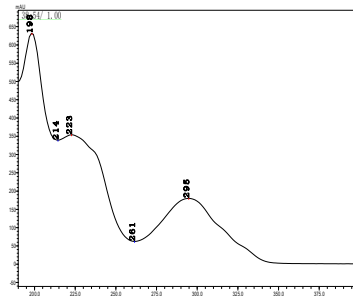
噻唑锌



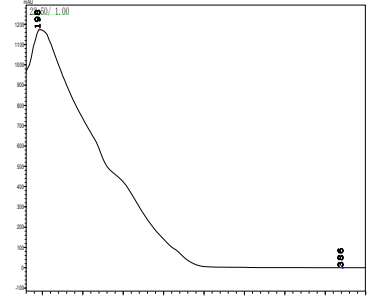
莠去津



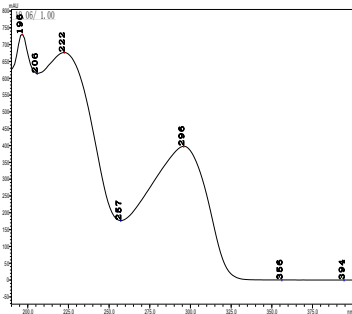
敌草隆



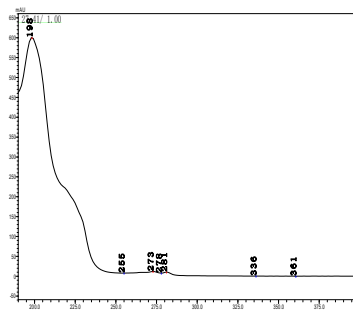
哒螨灵



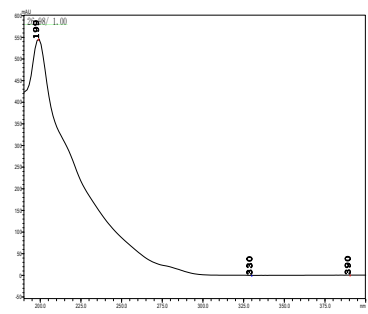
啉菌酯



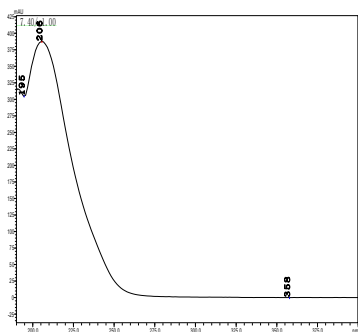
乙嘧酚



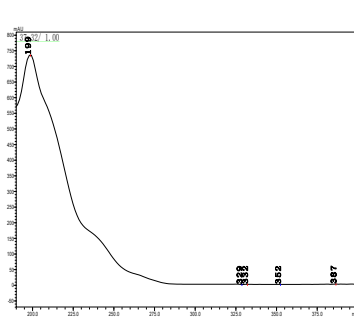
戊菌唑



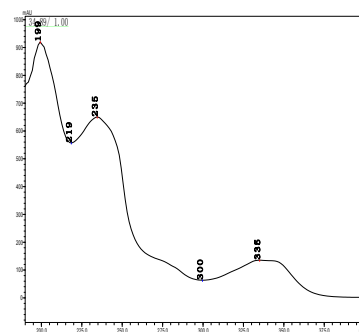
螺虫乙酯



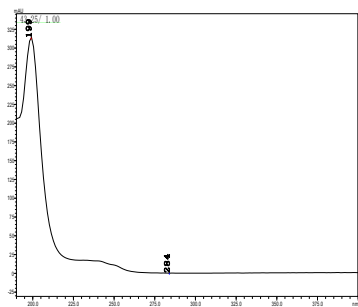
灭蝇胺



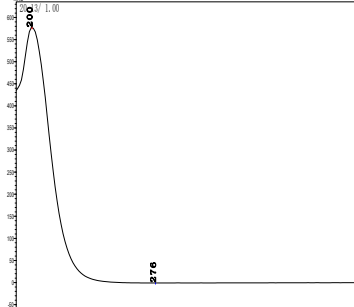
氯氟吡氧乙酸异辛酯



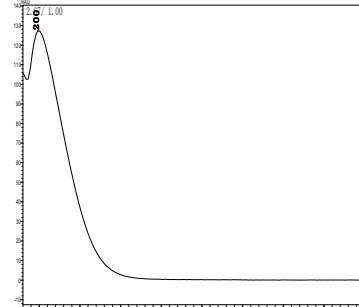
精喹禾灵



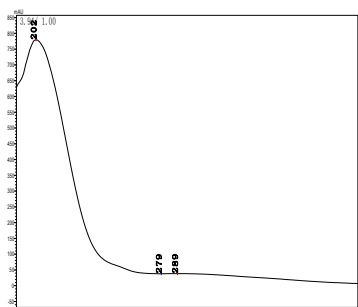
松脂酸铜



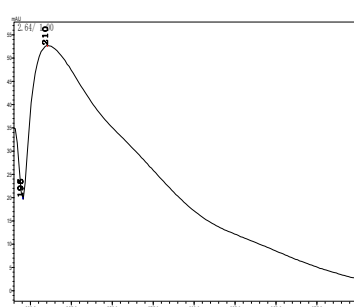
三唑锡



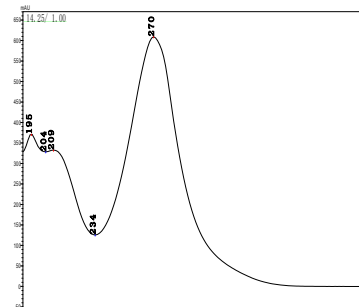
丁酰肼



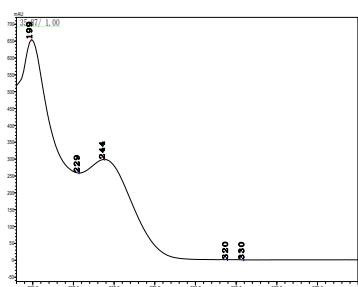
喹啉铜



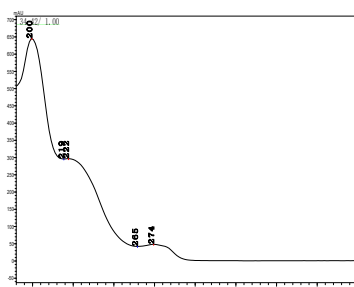
胺鲜酯柠檬酸盐



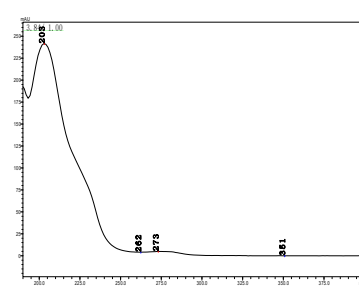
吡虫啉



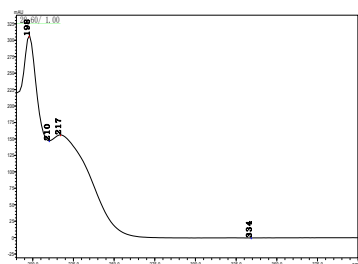
噻嗪酮



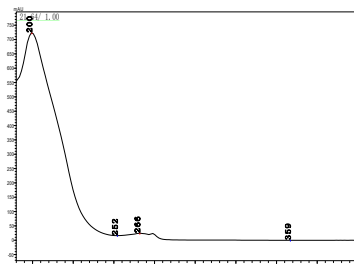
高效氟吡甲禾灵



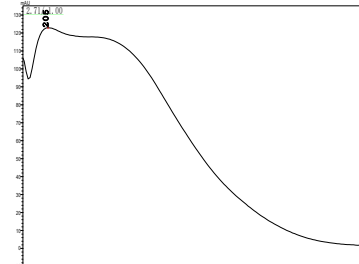
麦草畏



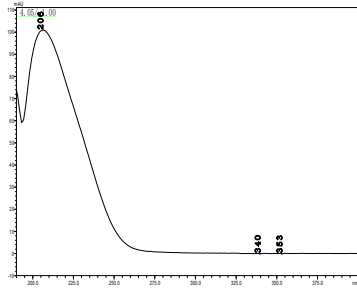
噻唑膦



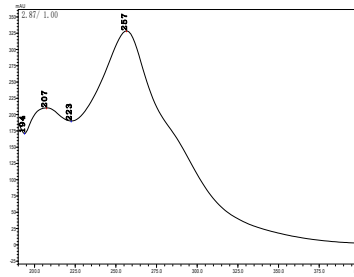
精甲霜灵



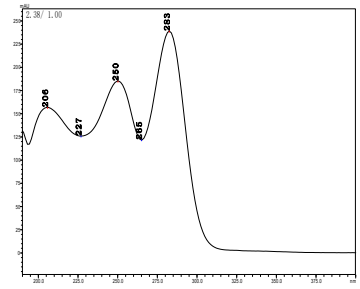
草甘膦



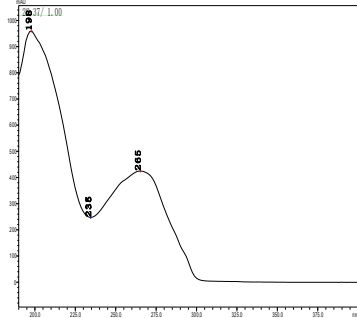
噁霉灵



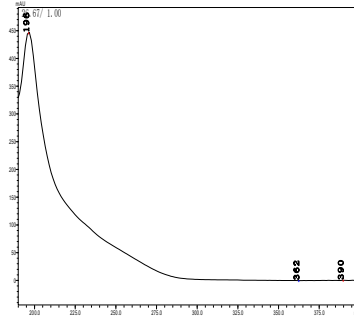
硝磺草酮



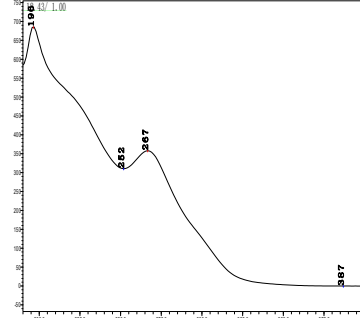
威百亩



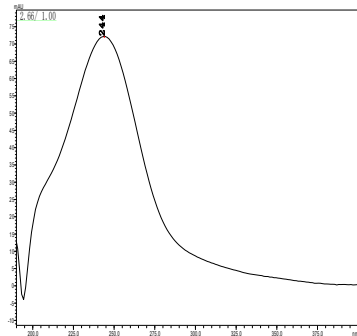
咯菌腈



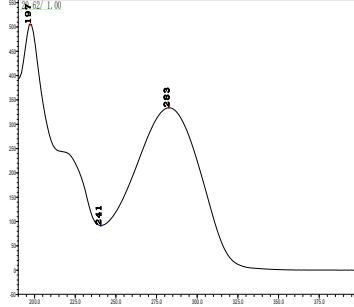
噻呋酰胺



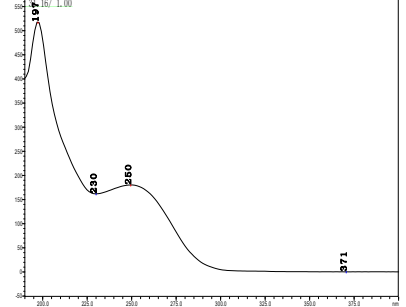
甲基硫菌灵



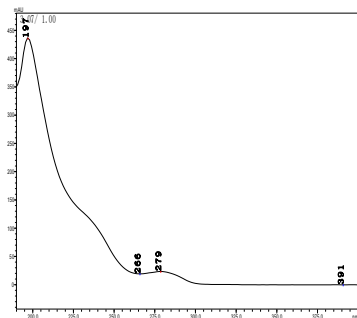
亚硝基草甘膦



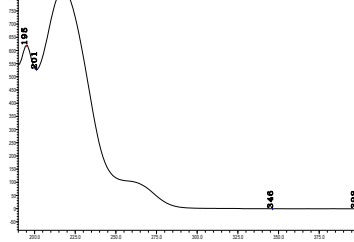
辛硫磷



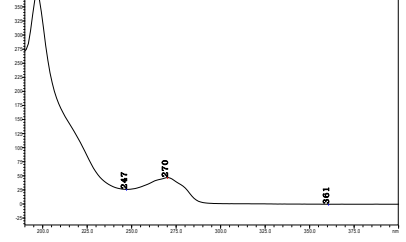
肟菌酯



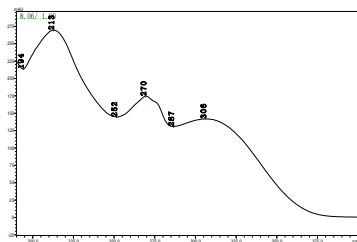
异丙胺



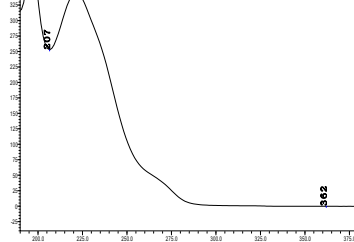
氰草津



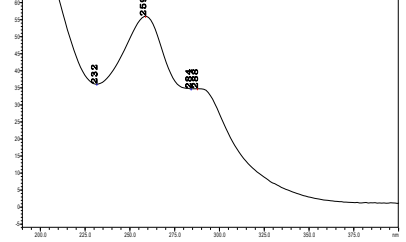
氟吡菌酰胺



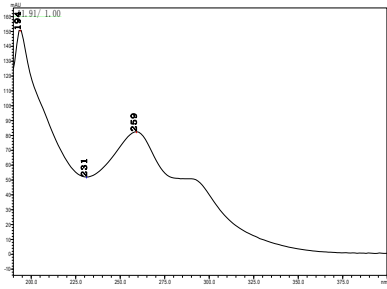
烯啶虫胺



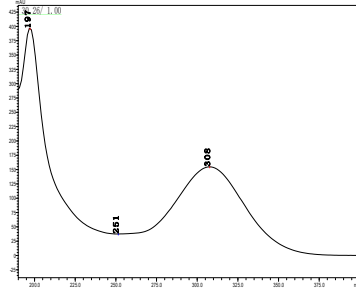
莠灭净



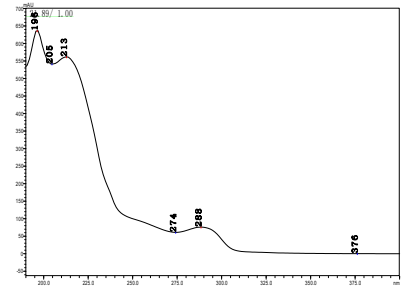
环黄酮 I



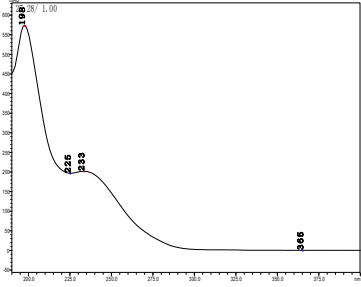
环黄酮 II



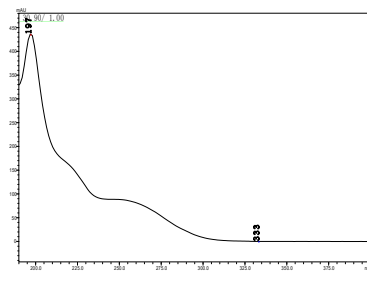
吡唑解草酯



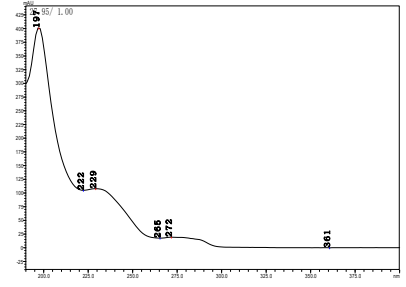
丙炔氟草胺



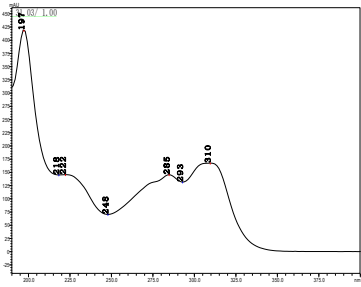
虫酰肼



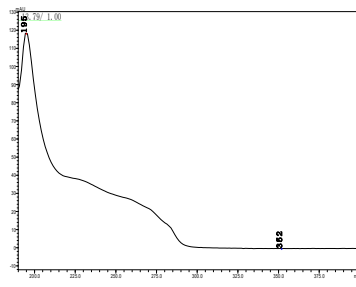
吡唑萘菌胺



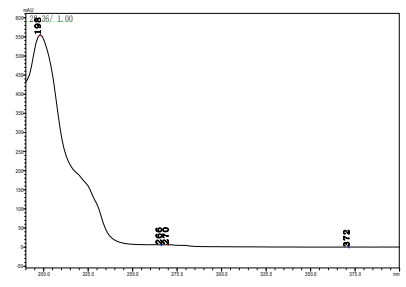
氯氟醚菌唑



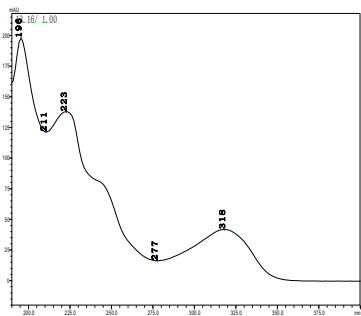
茚虫威



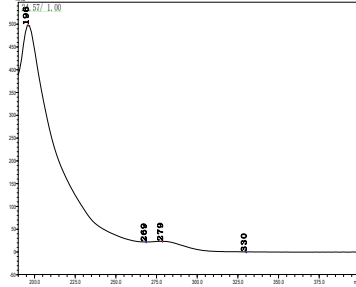
双氟磺草胺



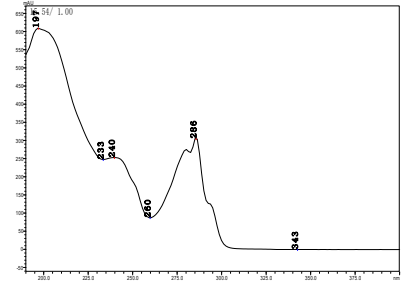
己唑醇



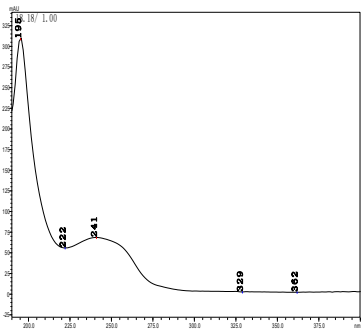
噻霉酮



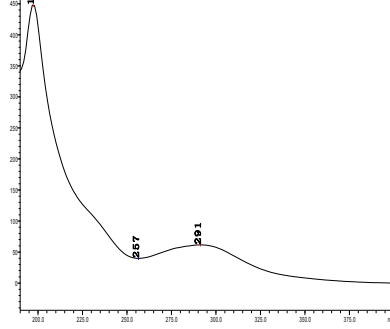
甲氧虫酰肼



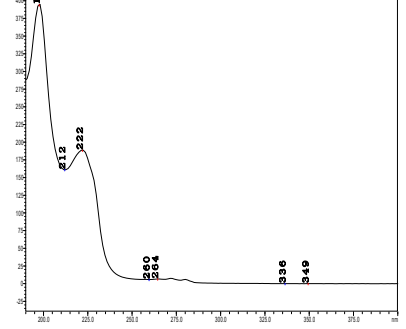
苯菌灵



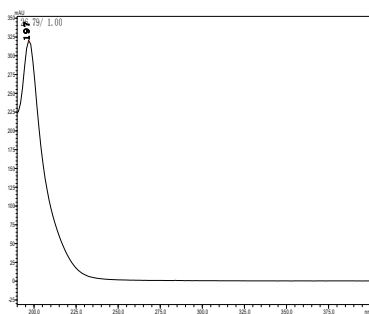
甲基二磺隆



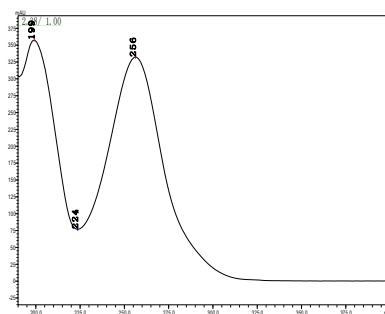
乙羧氟草醚



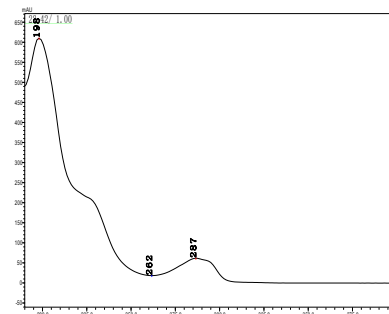
对-二氯苯



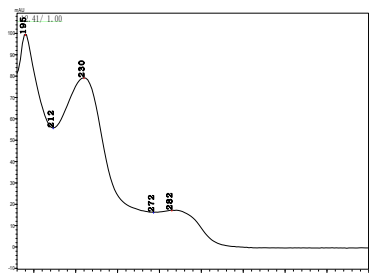
氯吡磷



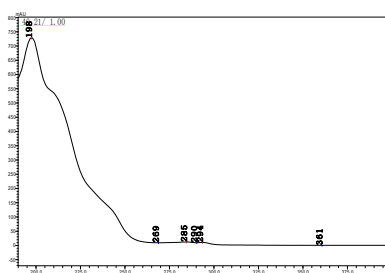
磺草灵



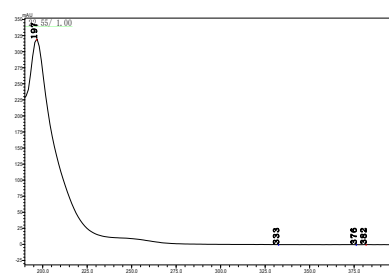
4-溴-2-氯苯酚



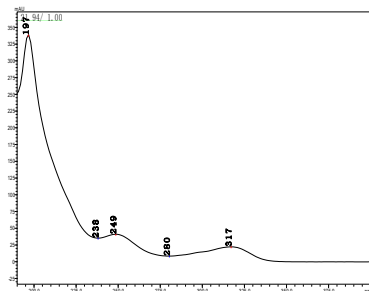
五氟磺草胺



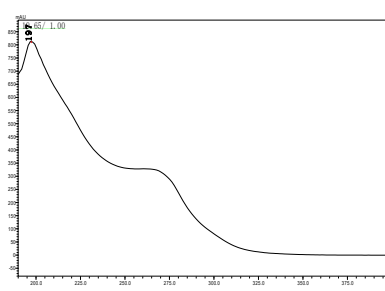
辛酰溴苯腈



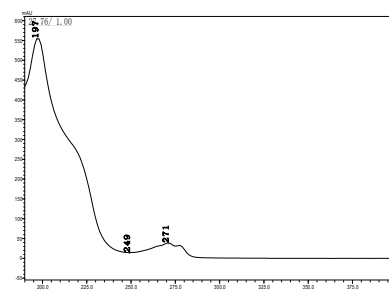
克菌丹



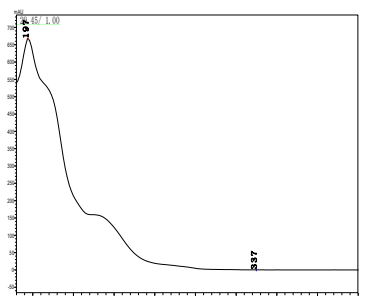
2,4,6-三氯苯酚



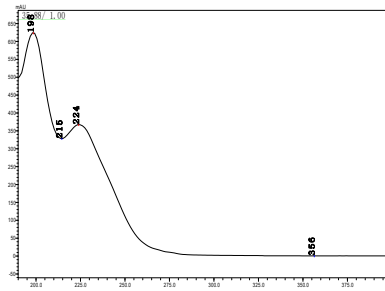
溴氰虫酰胺



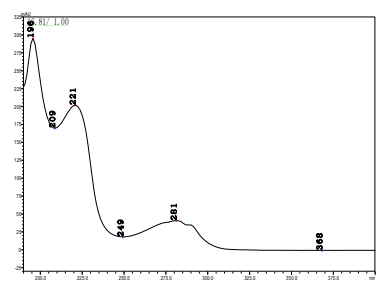
苯硫威



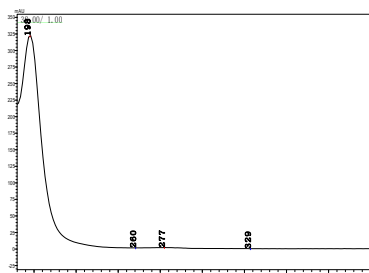
苯酰菌胺



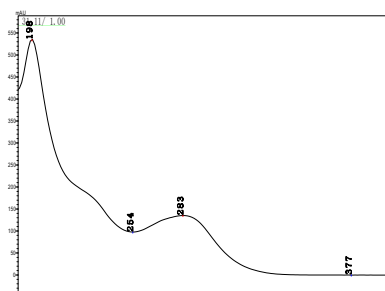
噻螨酮



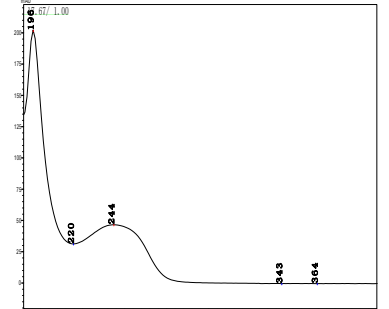
吡啶丁酸



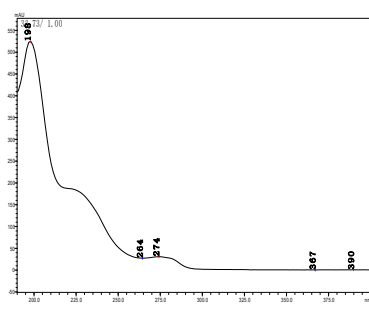
苯丁锡



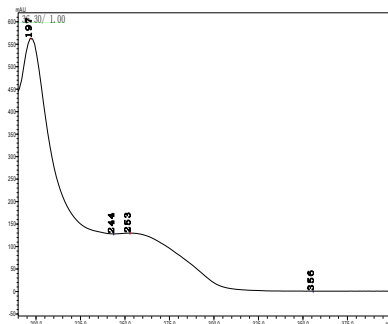
吡氟酰草胺



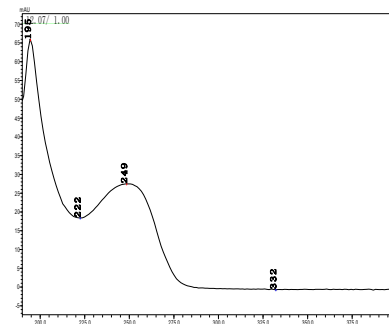
吡啶磺隆



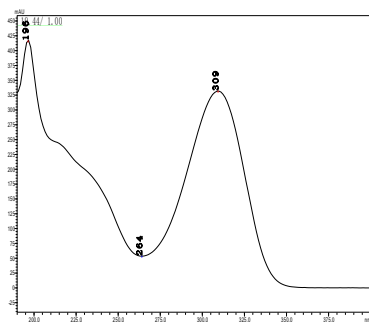
噁嗪草酮



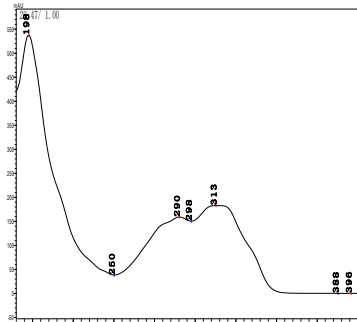
氟虫脲



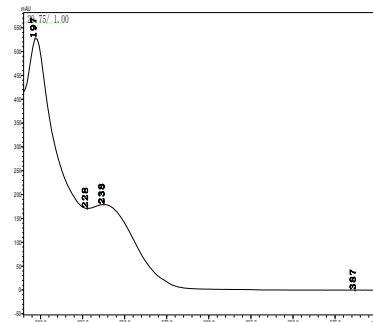
氟吡磺隆



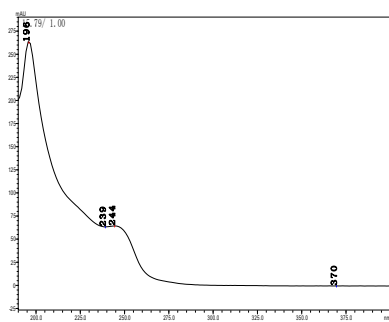
噻唑菌胺



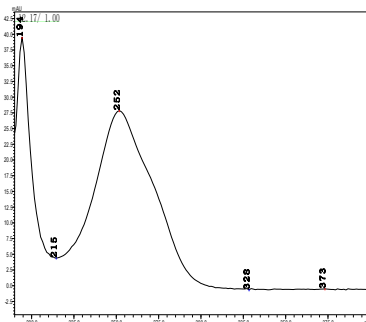
蝇毒磷



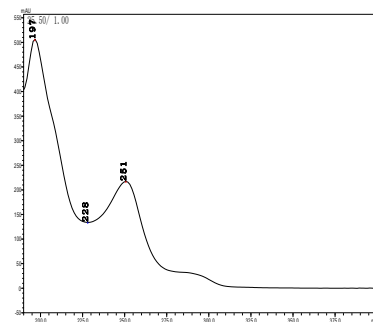
地虫硫磷



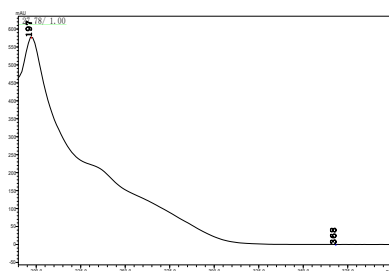
双草醚



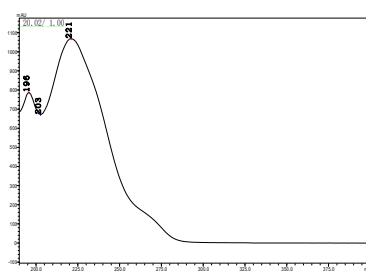
甲基硫环磷



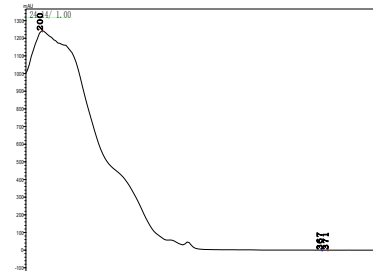
苯线磷



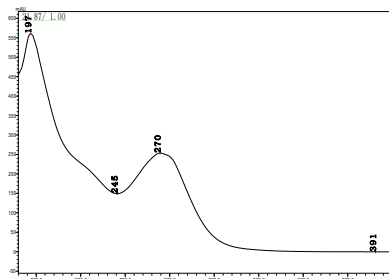
氟虫双酰胺



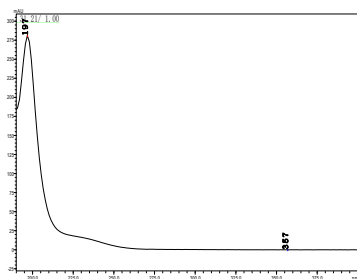
西草净



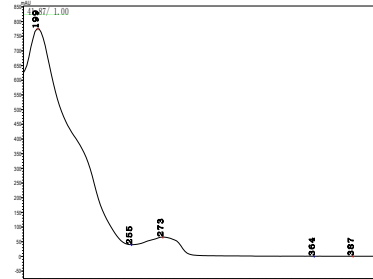
苯噻酰草胺



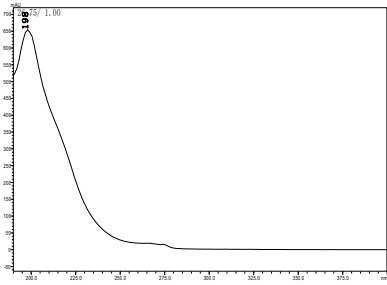
异噁唑草酮



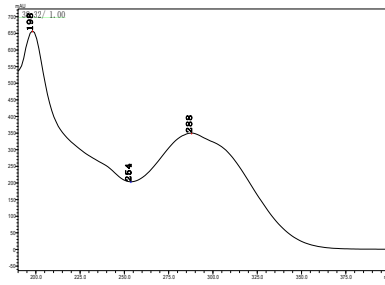
硫线磷



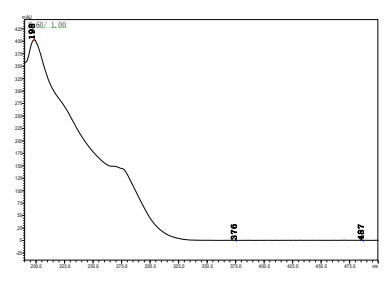
醚菊酯



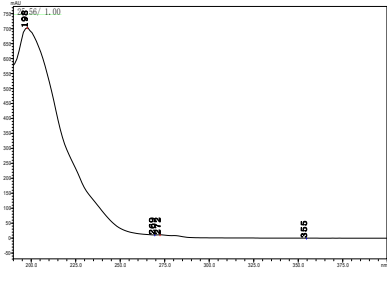
异丙甲草胺



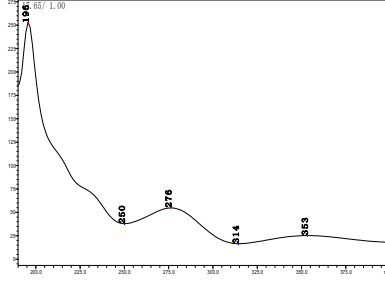
双甲醚



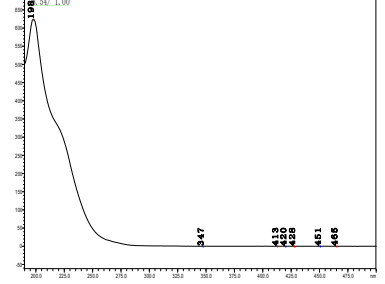
甲咪唑烟酸



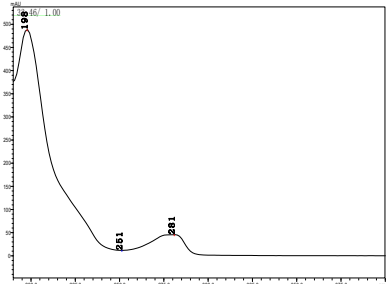
腐霉利



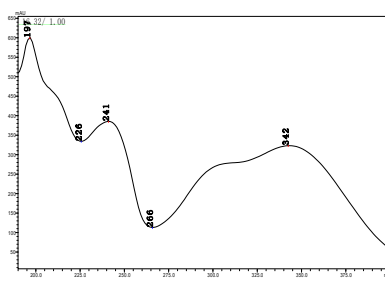
邻硝基苯酚钾



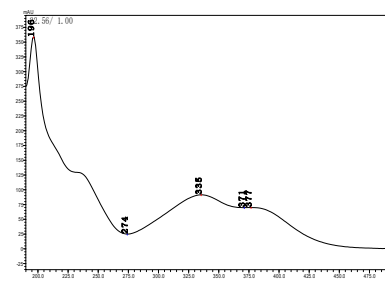
莎稗磷



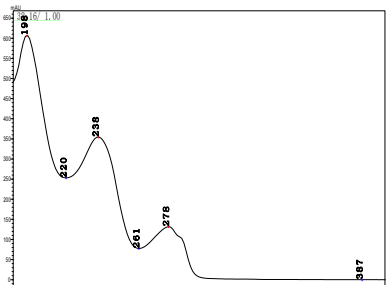
丙硫克百威



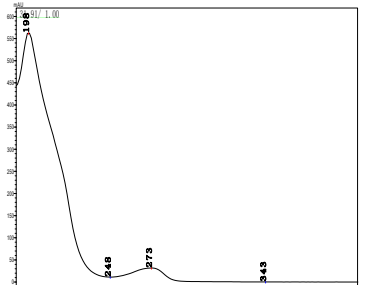
2,4-二硝基苯酚钾



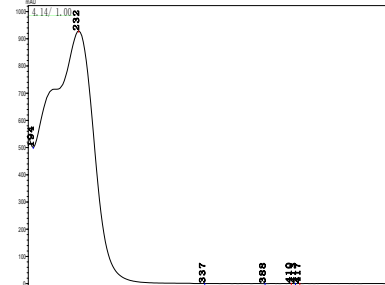
杀螺胺乙醇胺盐



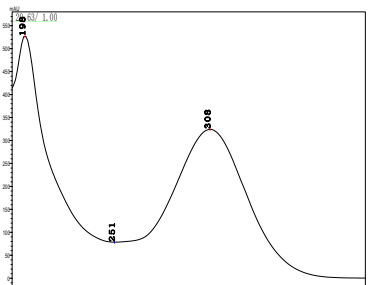
精噁唑禾草灵



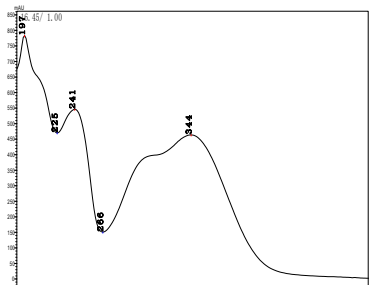
七氟甲醚



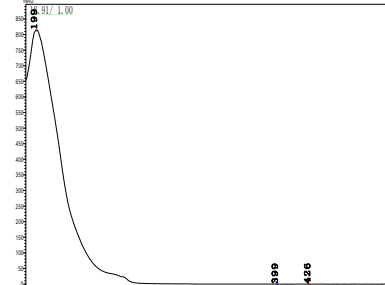
丙烯硫脲



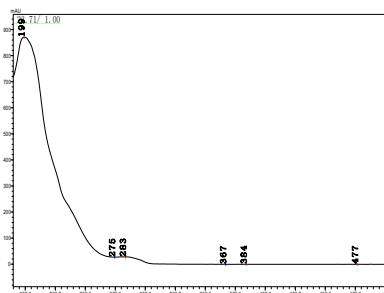
解草啞



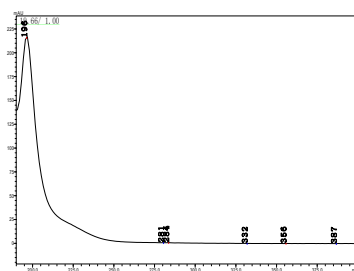
5-硝基邻苯甲氧基苯酚钠



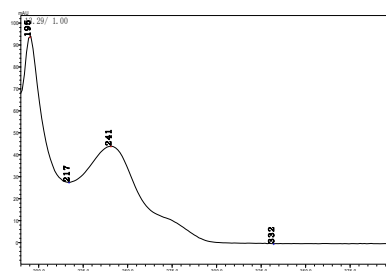
伯酰胺



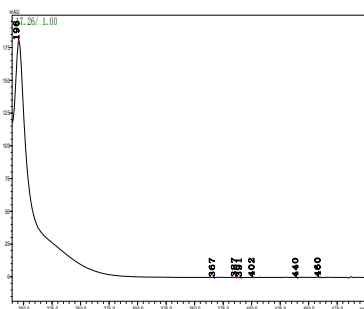
炔苯酰草胺



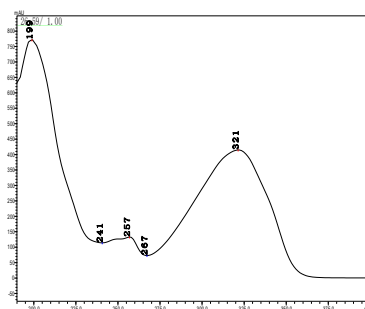
印楝素 II



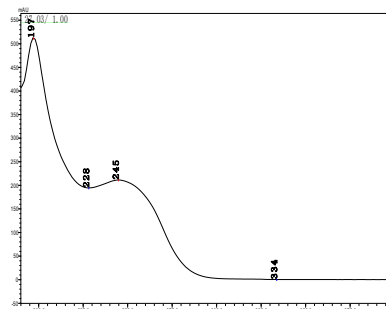
甲噁磺隆



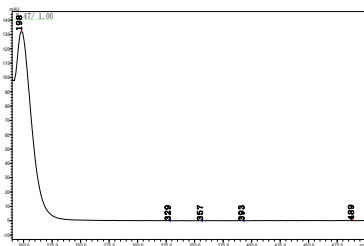
溴菌腈



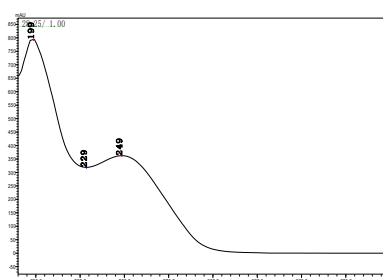
蛇床子素



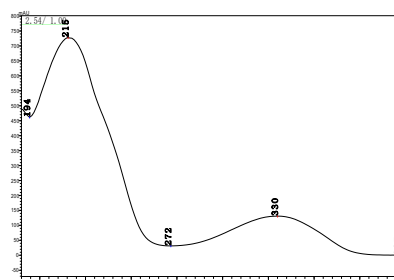
硅噻菌胺



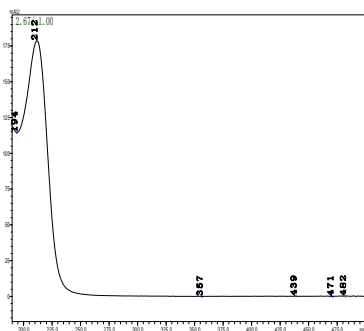
氯溴异氰尿酸 I



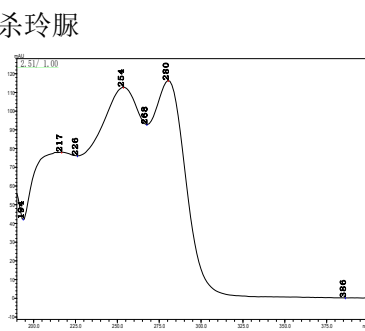
杀铃脲



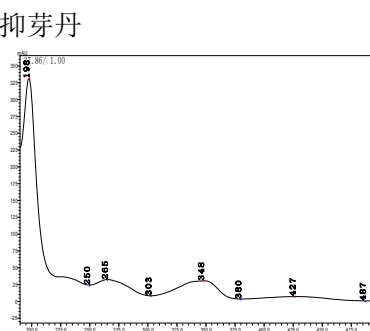
抑芽丹



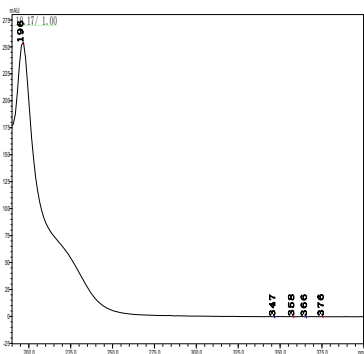
氯溴异氰尿酸 II



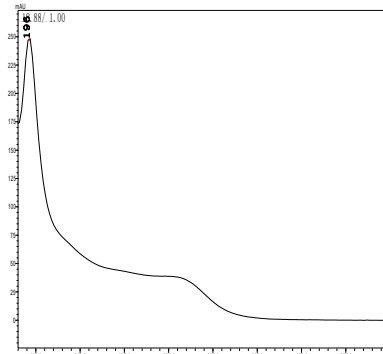
福美肿 I



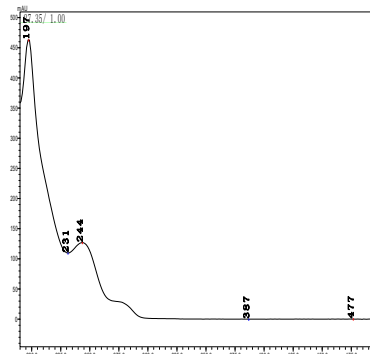
小檗碱



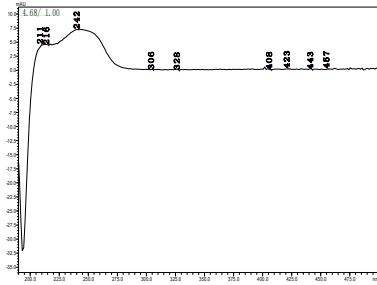
印楝素 I



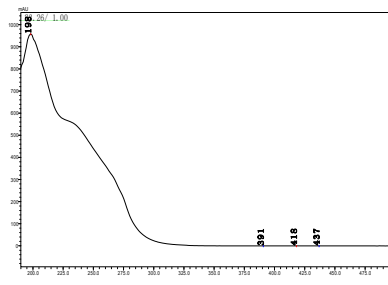
福美肿 II



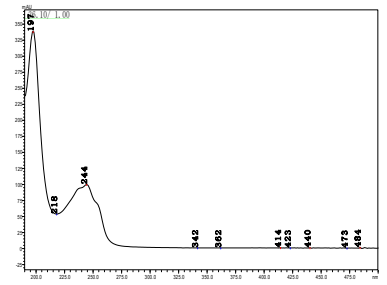
唑草酮



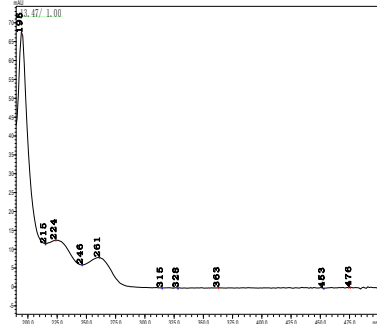
啉嘧磺隆 I



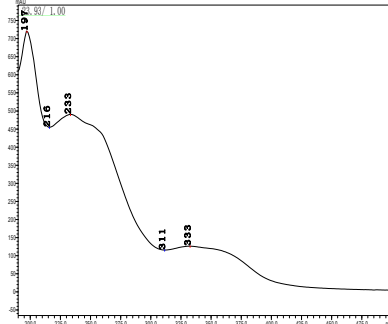
啉嘧磺隆 II



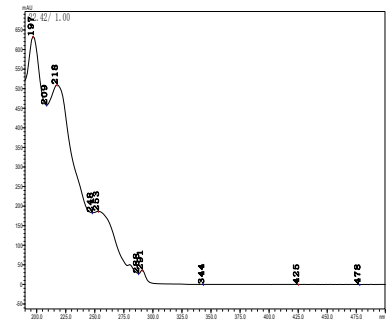
阿维菌素 B2a



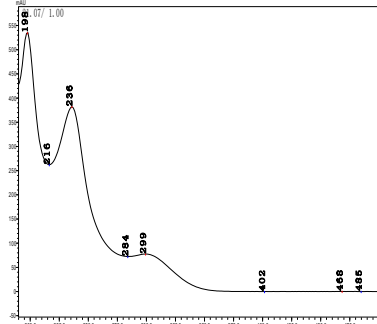
二氟苄腈



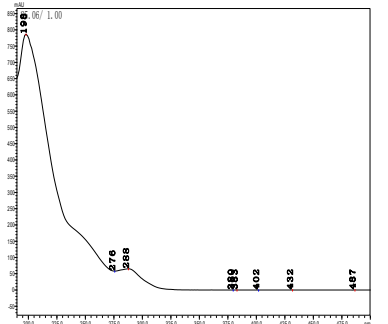
苯噻菌胺



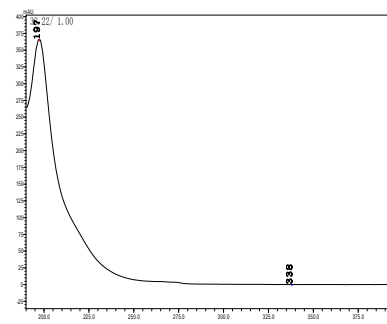
氟菌唑



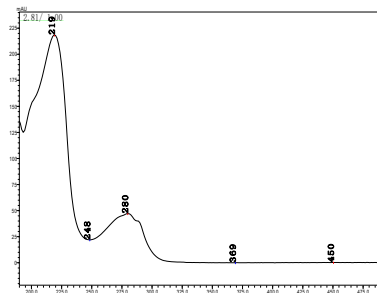
环酰菌胺



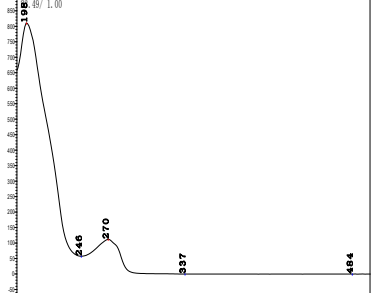
丙草胺



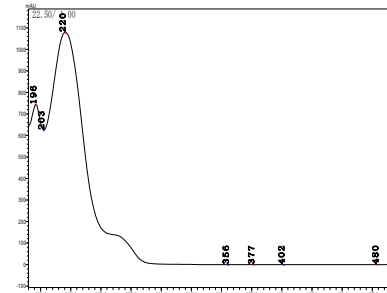
特丁津



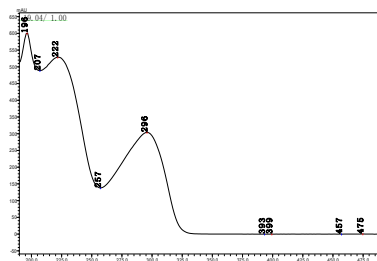
吡啶乙腈



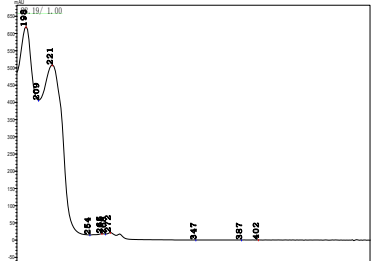
氟吡菌胺



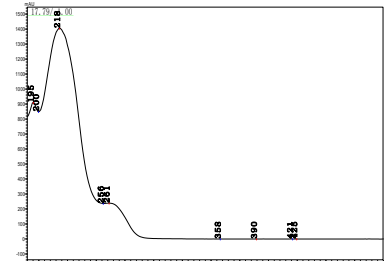
西玛津



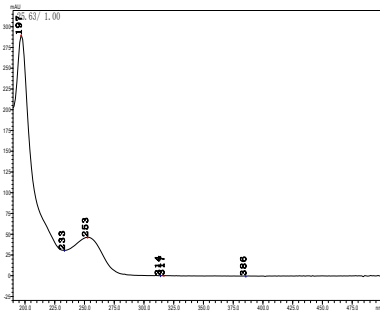
乙嘧酯



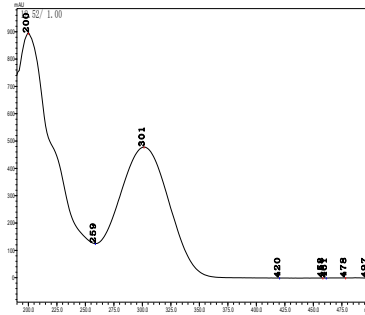
1,4-二氯苯



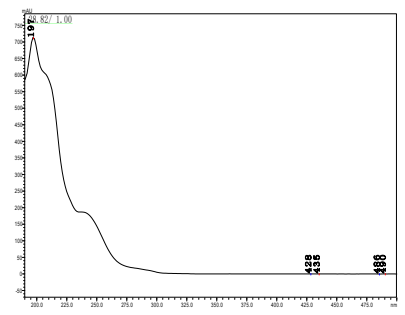
西玛津



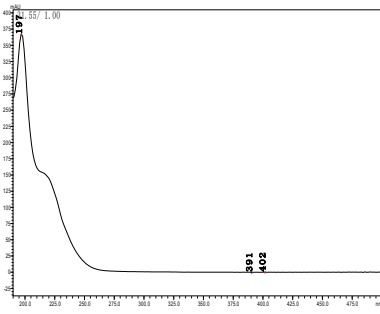
丙硫菌唑



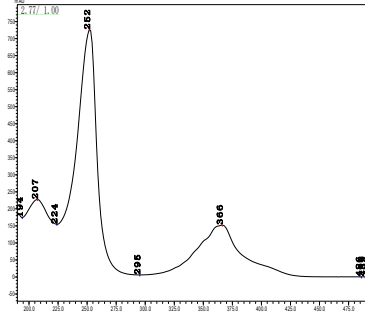
三氮唑嘧啶酮



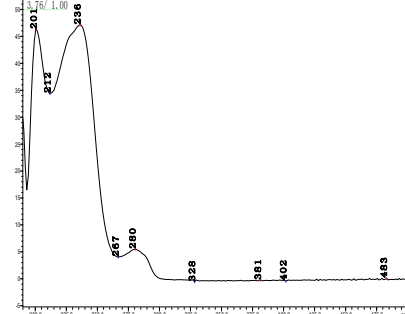
苯酰锰锌



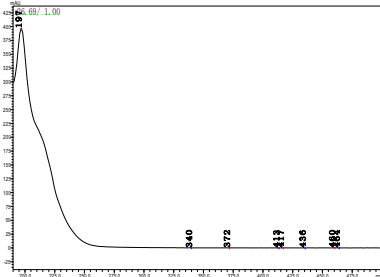
硫丹醚



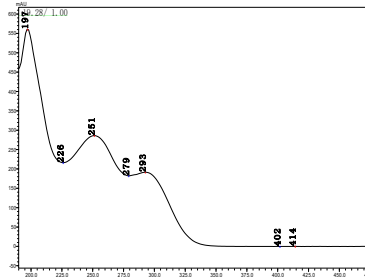
申嗪霉素



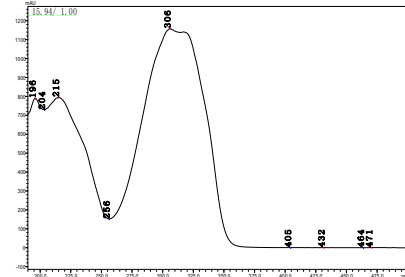
醚磺隆



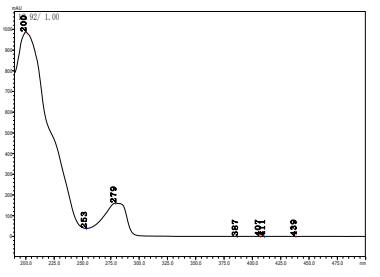
硫丹醇



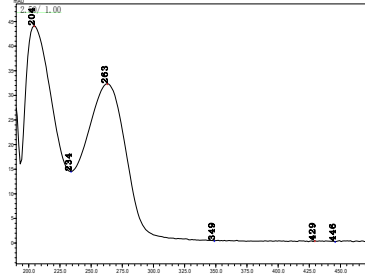
萎锈灵



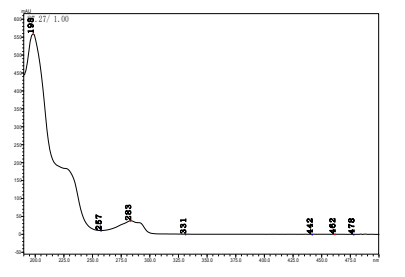
藜芦碱



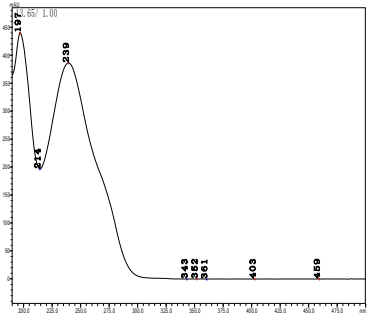
咪喃酚



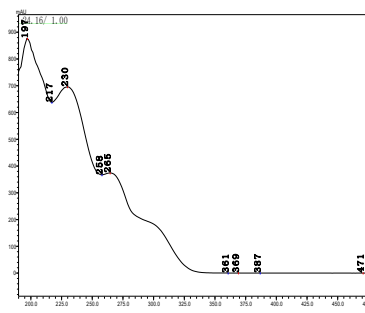
多抗霉素 B



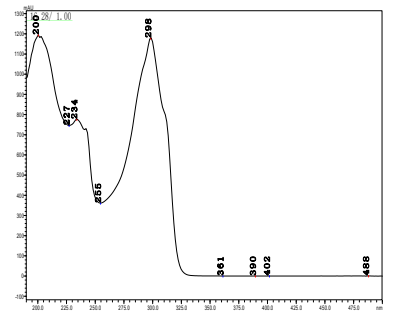
稻瘟酰胺



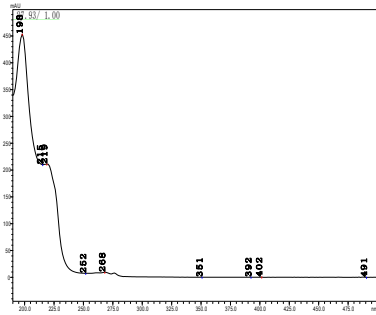
4, -4' 一联吡啶



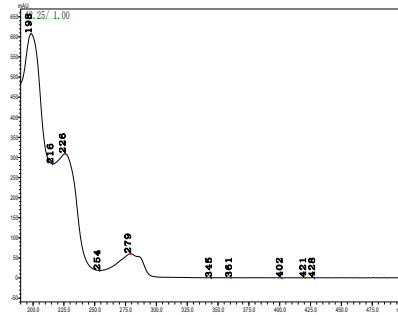
联苯胍酯



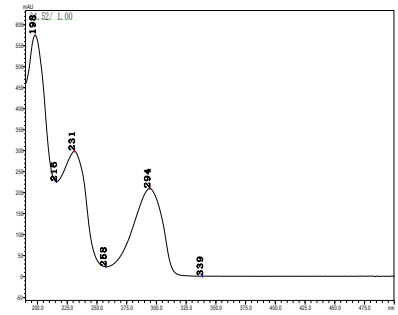
噻菌灵



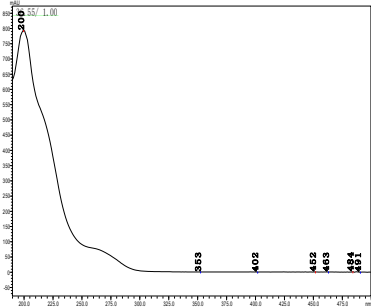
叶菌唑



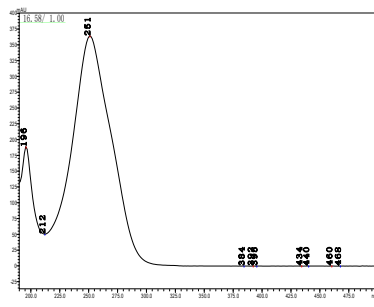
二甲四氯异辛酯



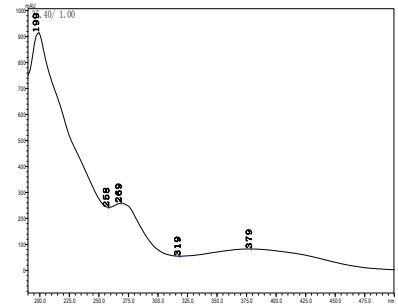
三氯吡氧乙酸丁氧基乙酯



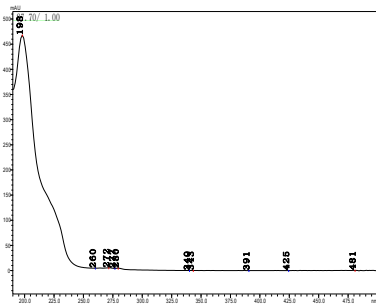
螺甲螨酯



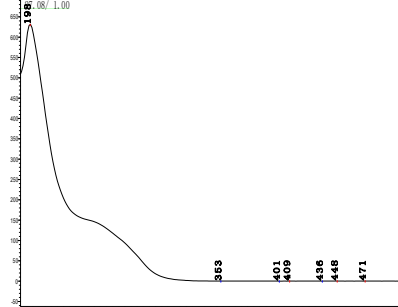
硫环磷



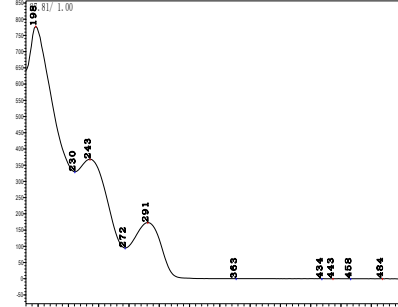
氟节胺



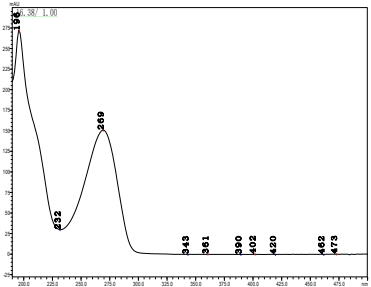
抑霉唑



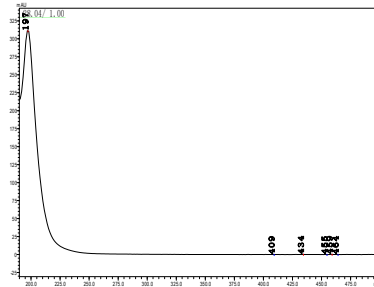
氟氯氰虫酰胺



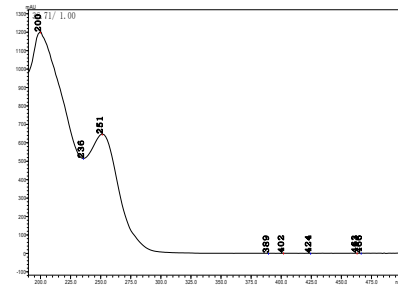
吡草醚



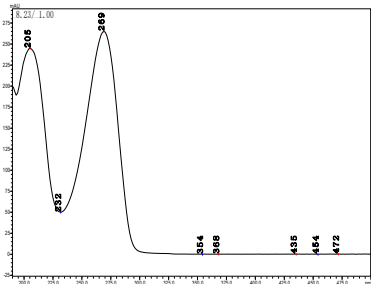
异戊烯基腺嘌呤



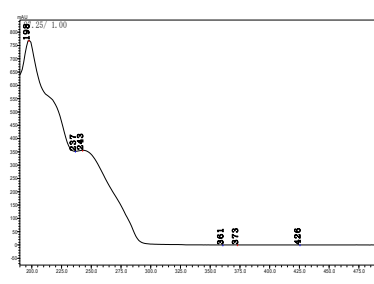
内吸磷



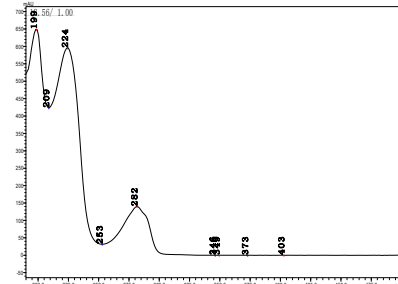
丁醚脲



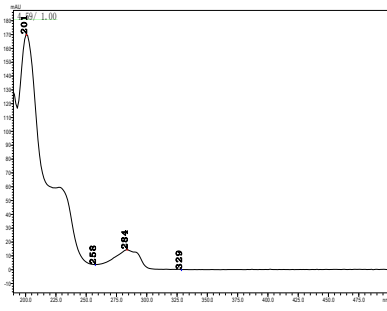
羟烯腺嘌呤



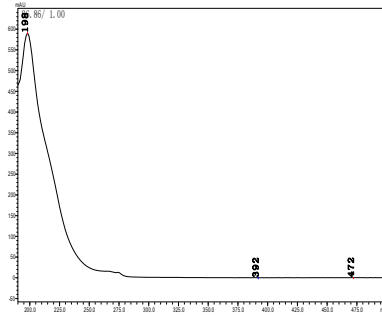
啶氧菌酯



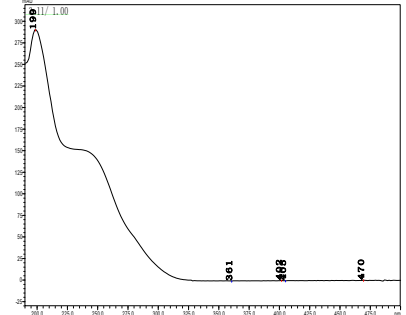
对氯苯酚



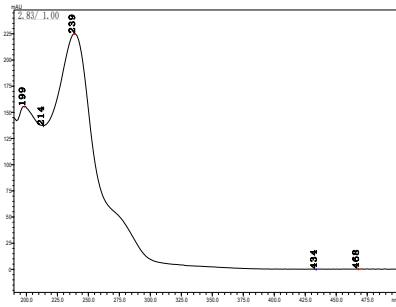
2.4 滴二甲铵盐



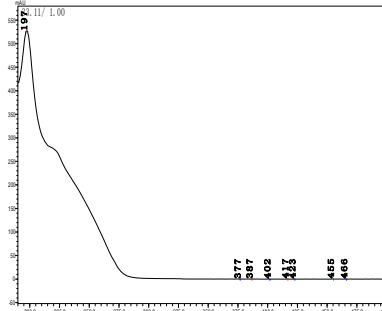
精异丙甲草胺



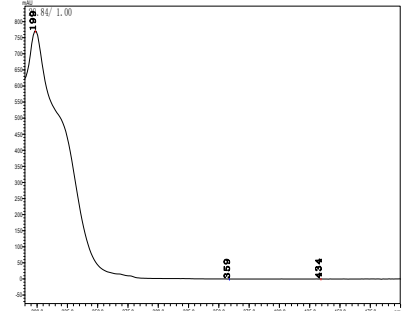
环丙环酰胺



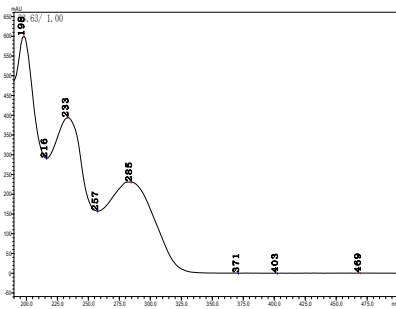
单啞磺隆



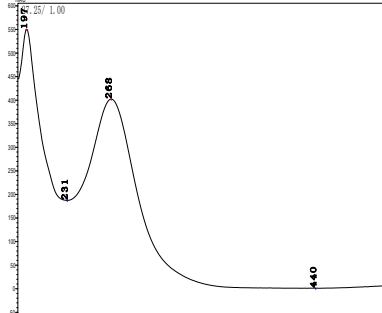
吡嗞胺



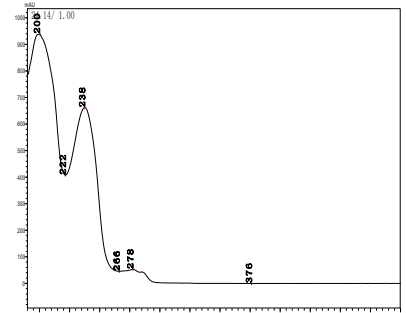
禾草丹



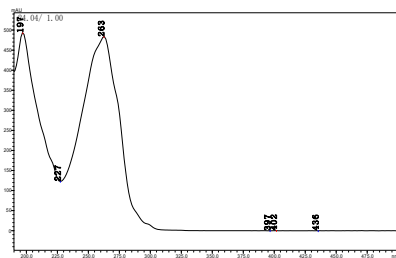
氟氟虫脞



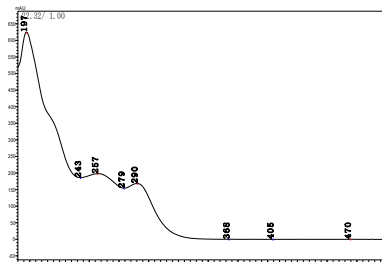
氟嗞嗞



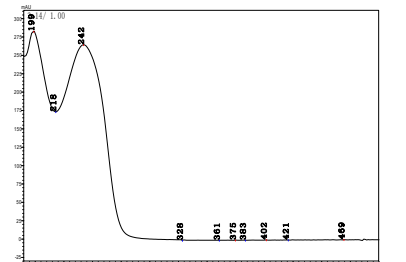
氯苯胺灵



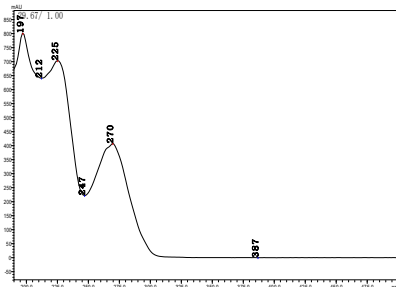
灭菌唑



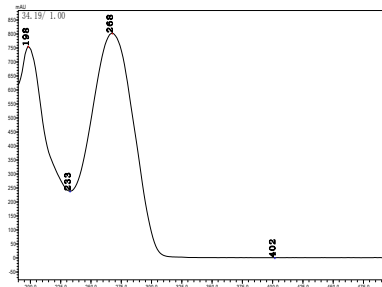
解草酮



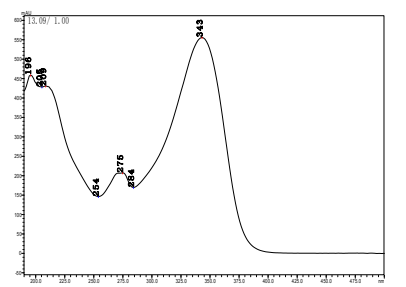
四啞啞磺隆



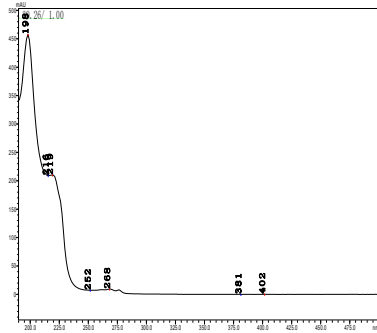
毒氟磷



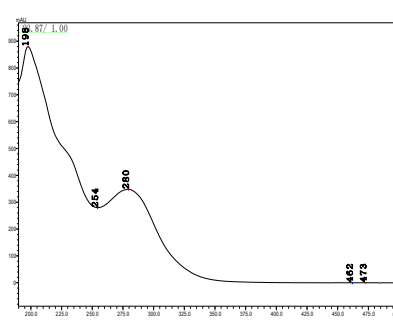
解草啞



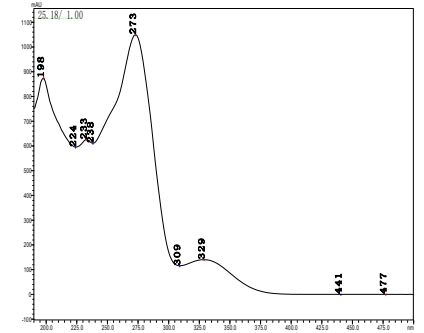
环氧虫啞



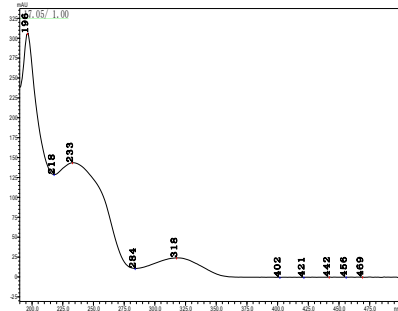
种菌唑



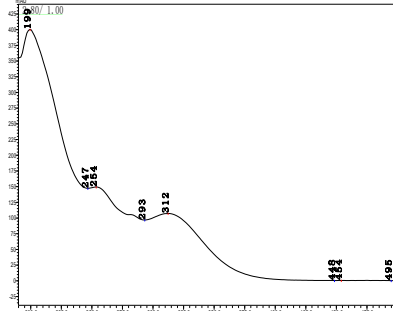
异噻菌胺



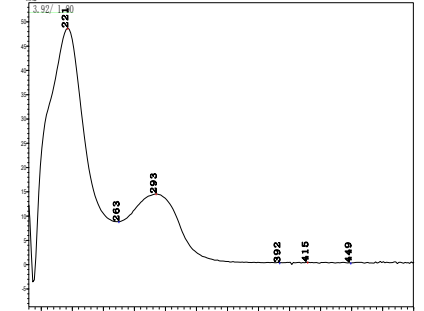
啉菌胺



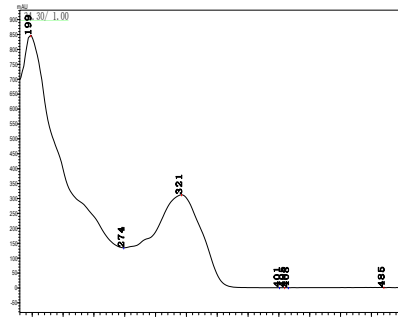
丙噁啉磺隆



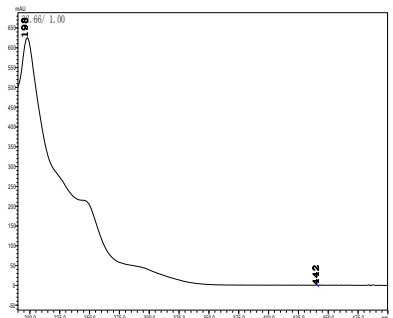
苯唑草酮



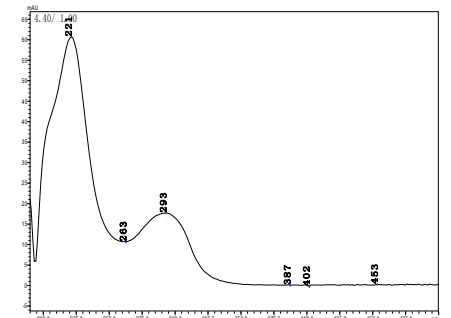
啉磺草胺 I



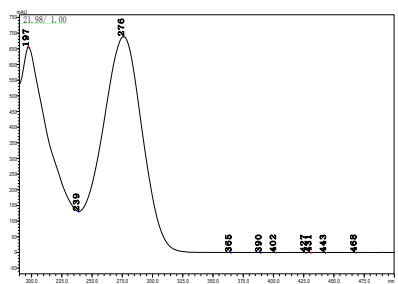
丁香菌酯



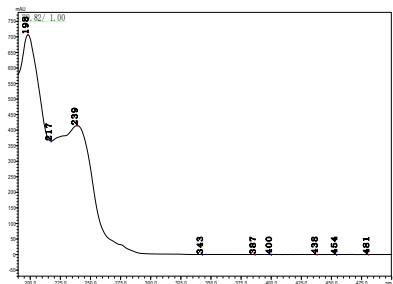
酰胺唑



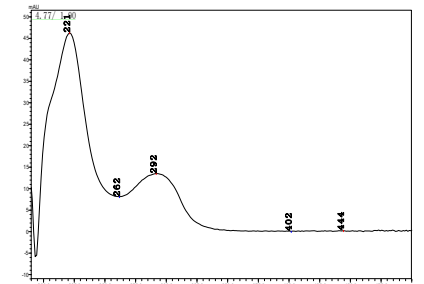
啉磺草胺 II



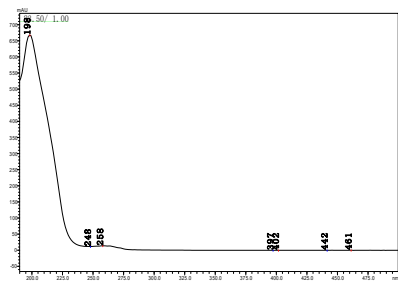
呋草酮



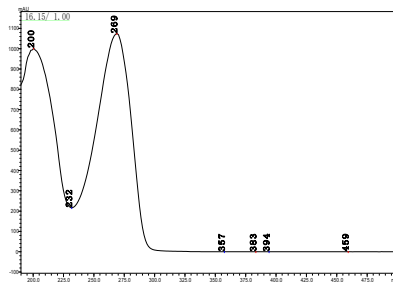
戊菌隆



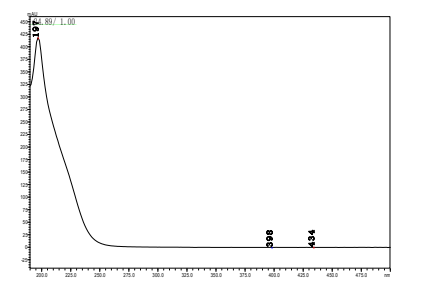
啉磺草胺 III



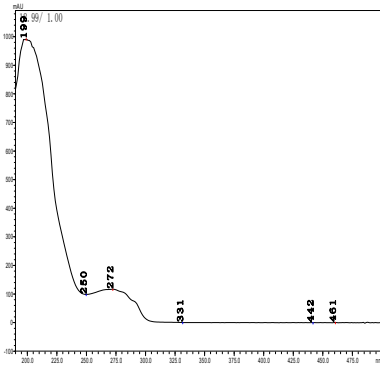
卞草隆



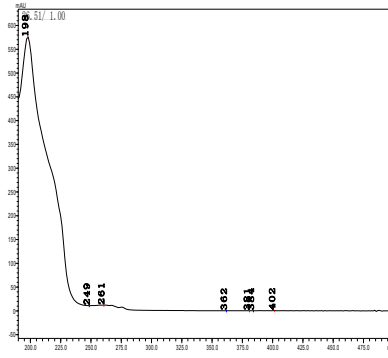
卞氨基唑啉



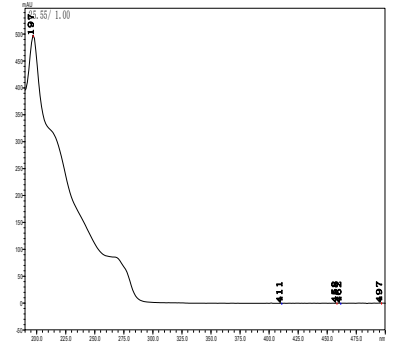
禾草敌



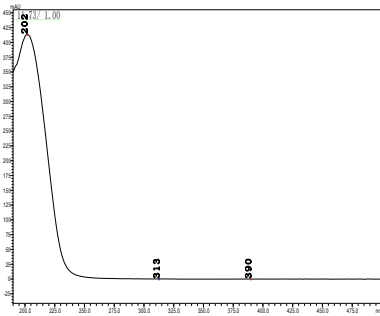
烯丙苯噻唑



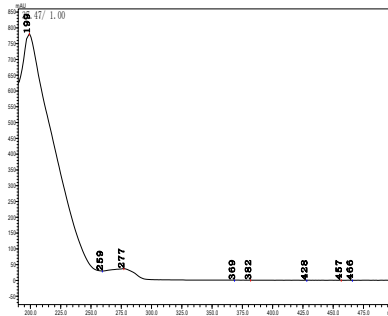
腈苯唑



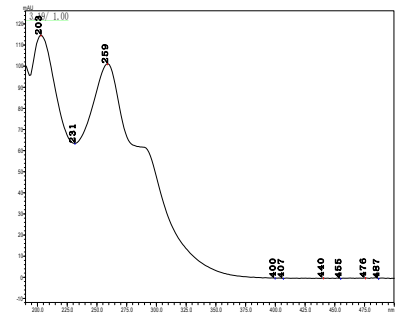
氟醚菌酰胺



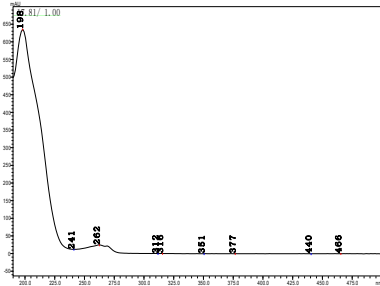
噻节因



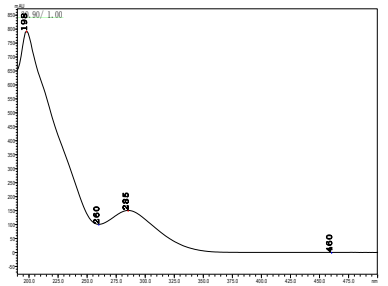
精高效氯氟氰菊酯



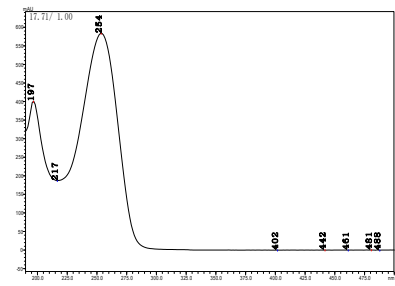
呋喃磺草酮



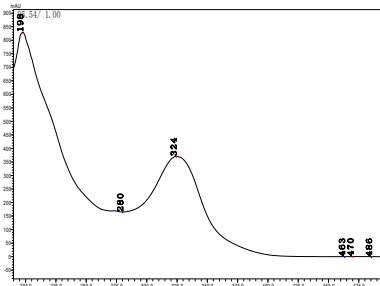
速灭威



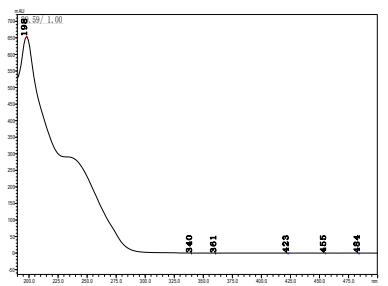
苯菌酮



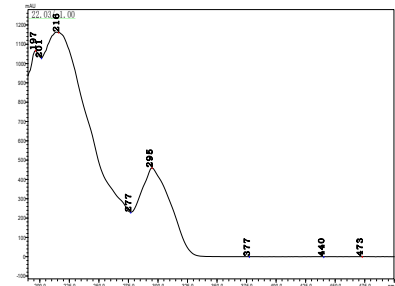
丁噻隆



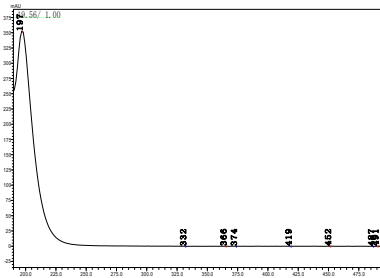
双环磺草酮



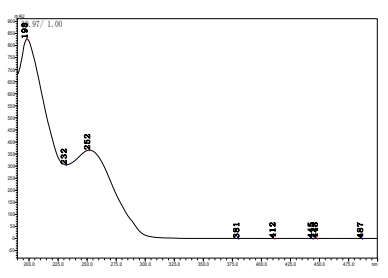
环氟菌胺



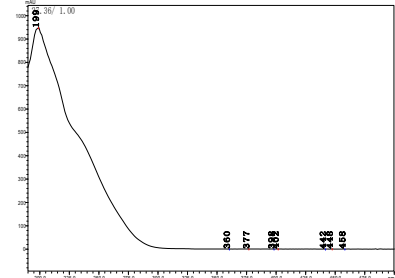
丙硫多菌灵



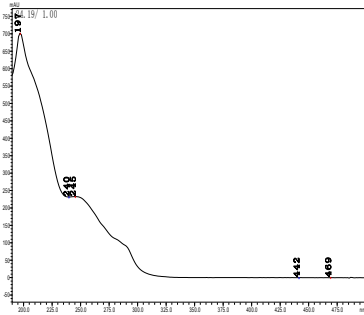
三十烷醇



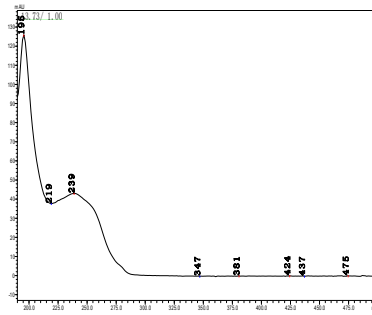
氟酰胺



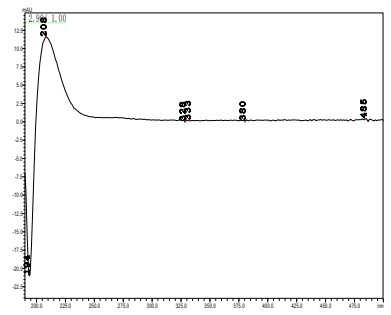
氟唑菌苯胺



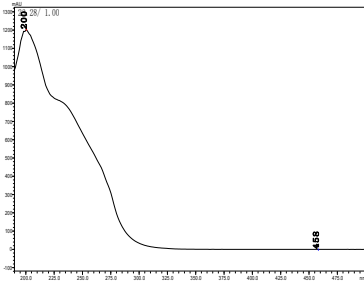
氟酰胺



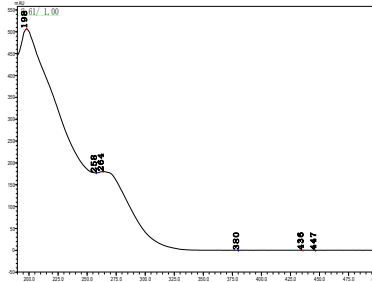
乙氧磺隆



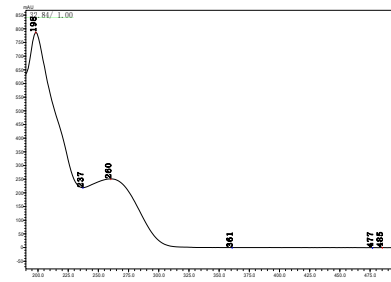
氯化钠



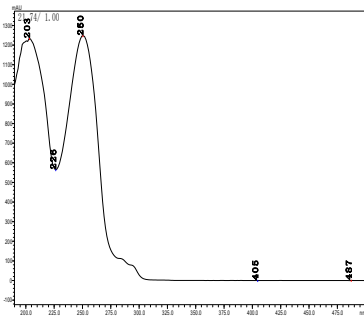
烟酰胺



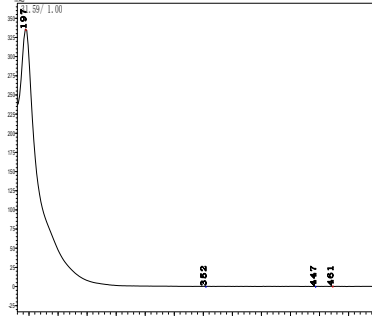
咪唑烟酸



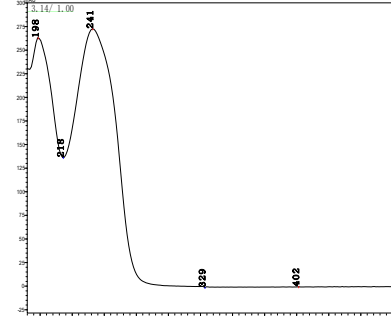
虫螨脲



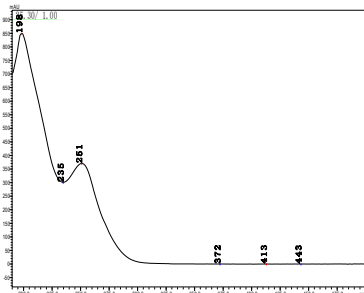
敌稗



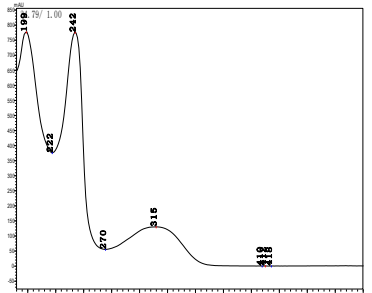
派草丹



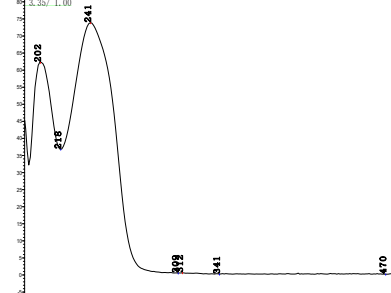
酰嘧磺隆 I



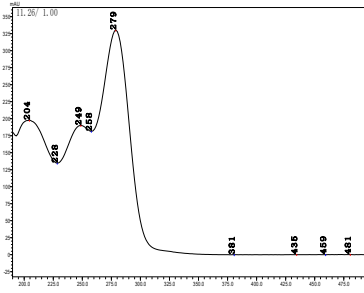
氟嘧菌酯



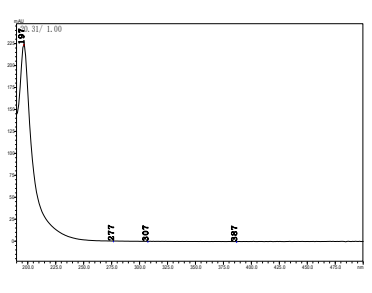
解毒唑 (解草酯)



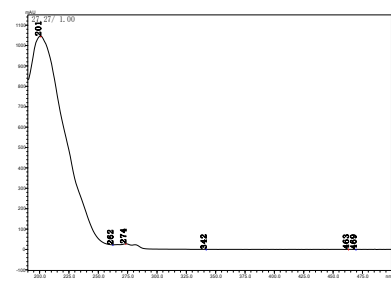
酰嘧磺隆 II



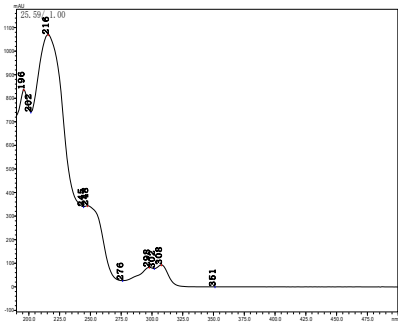
棉隆



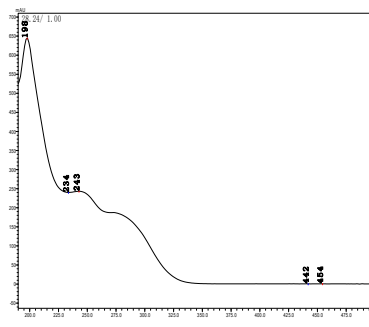
1,2-二溴乙烷



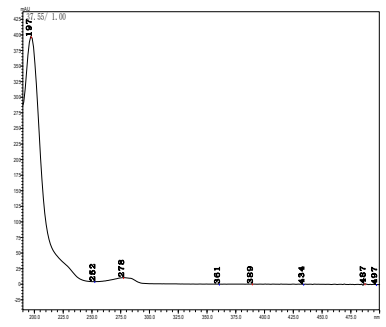
乙烯菌核利



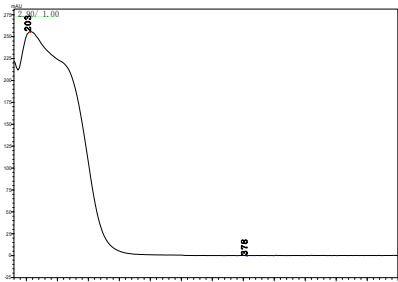
四氯苯醌



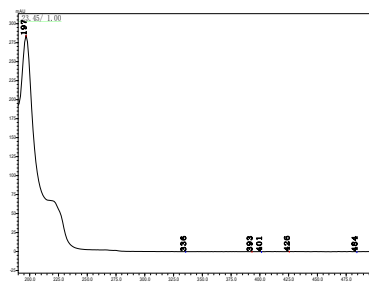
丁吡吗啉



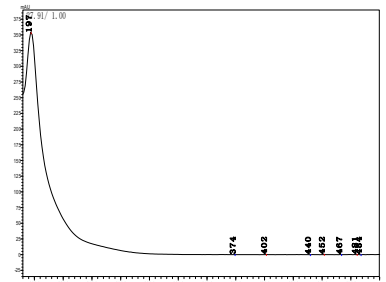
莜术醇



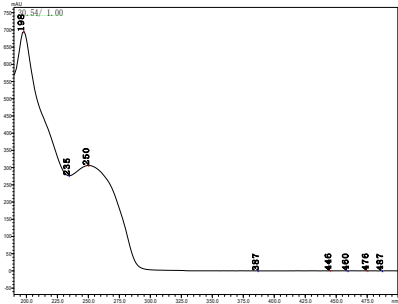
噻酮磺隆



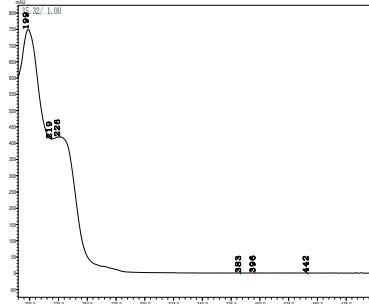
环唑醇



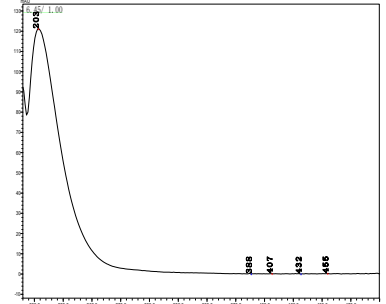
大蒜素



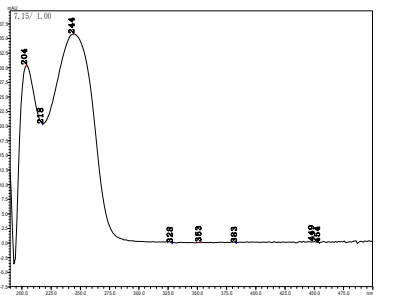
噻螨酯



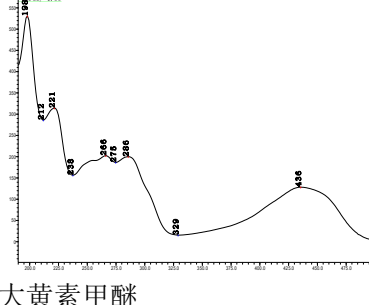
溴螨酯



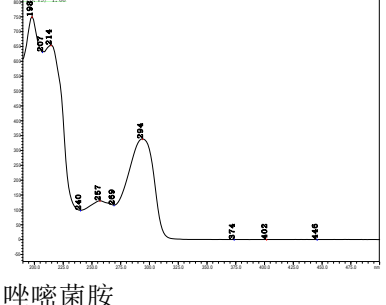
溴硝醇



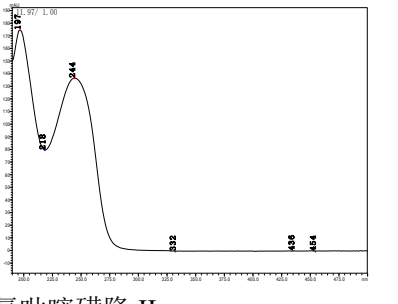
氯吡啶磺隆 I



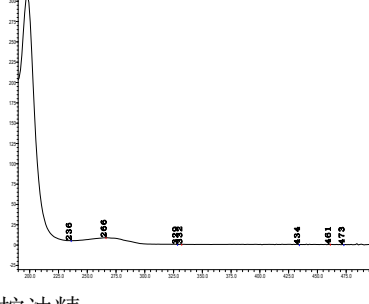
大黄素甲醚



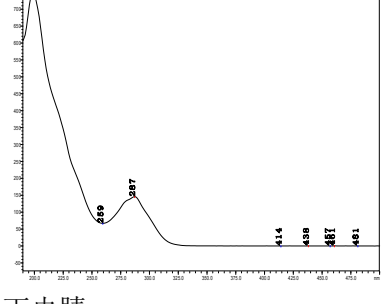
唑啉菌胺



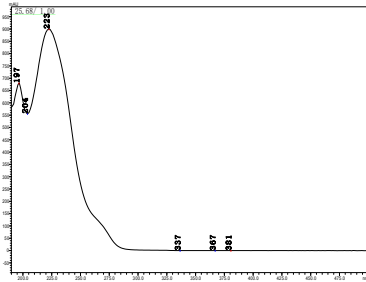
氯吡啶磺隆 II



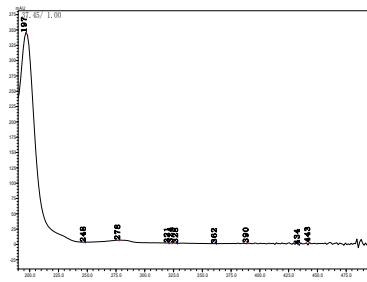
桉油精



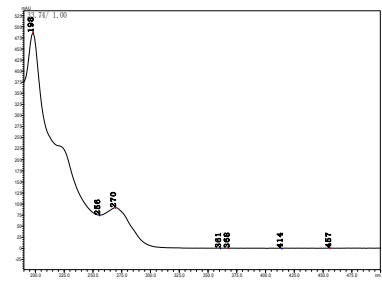
丁虫脒



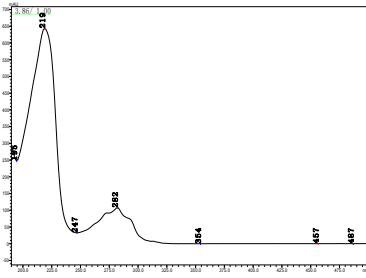
特丁净



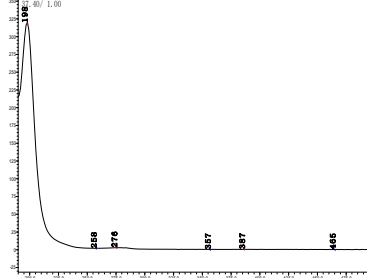
茶皂素



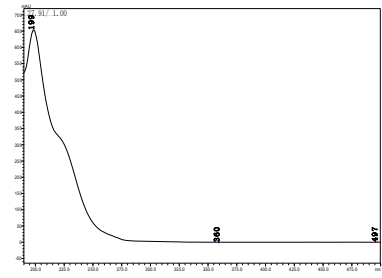
精吡氟禾草灵



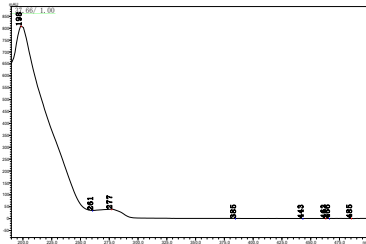
萘乙酸钠



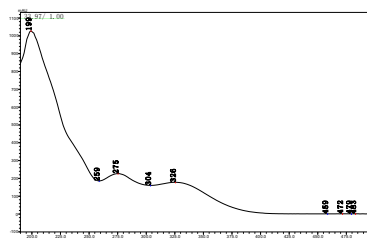
灭蚁灵



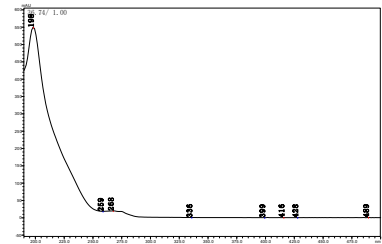
稻丰散



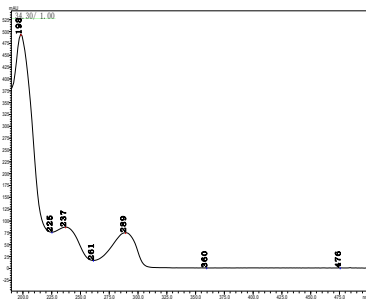
顺式氯氰菊酯



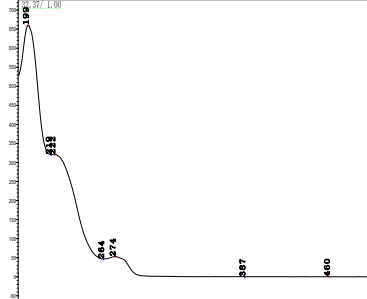
乙氧氟草醚



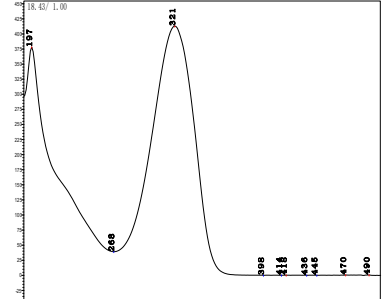
氟氯氰菊酯



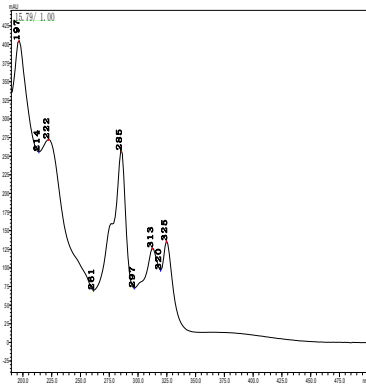
增效磷



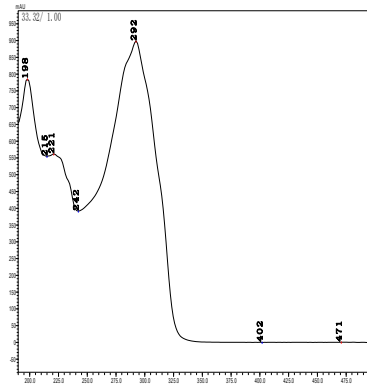
烯炔菌胺



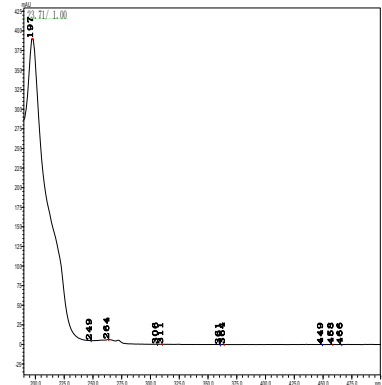
叶枯唑



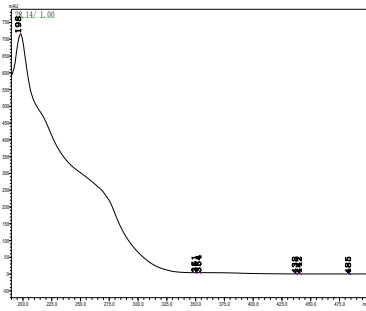
氯鼠酮



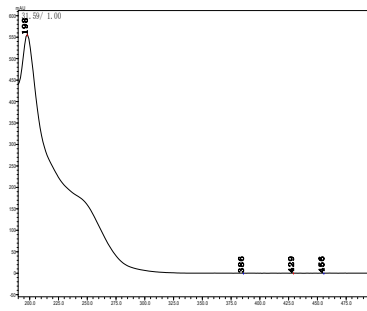
烯炔菌酯



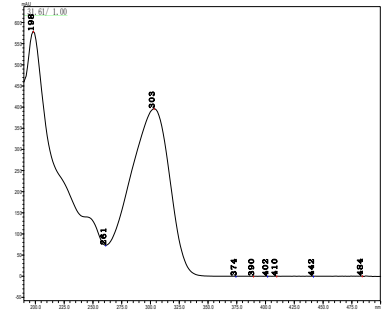
缢霉威



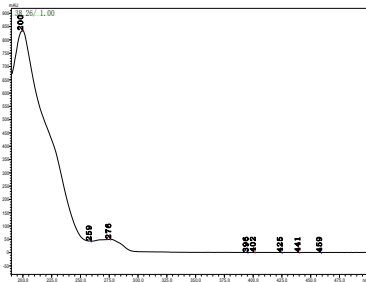
SP-1



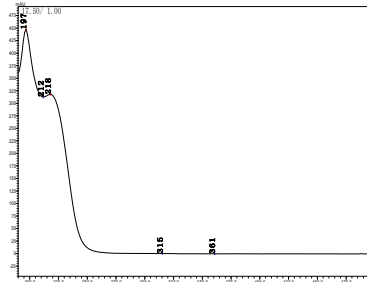
氟硫草定



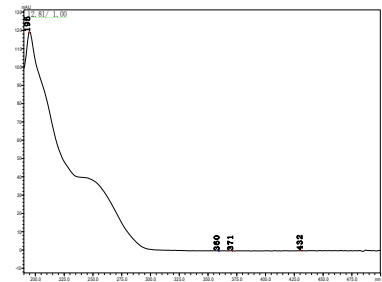
丙酯草醚



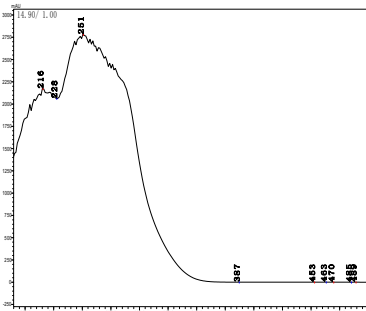
S-氰戊菊酯



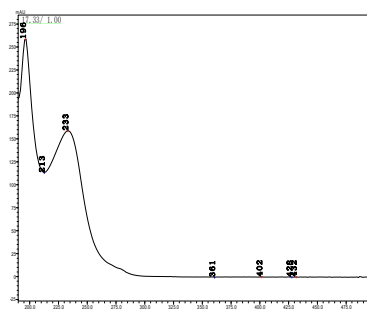
氨唑草酮



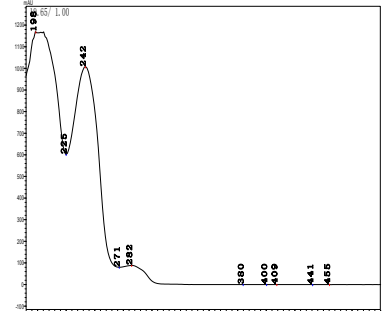
双氯磺草胺



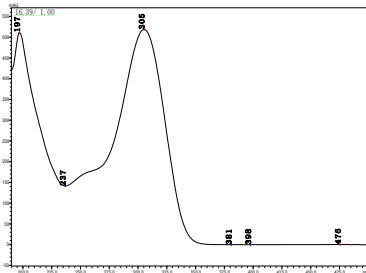
氯噁啉



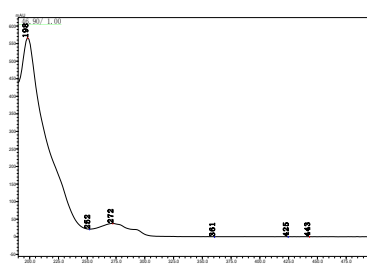
氟胺磺隆



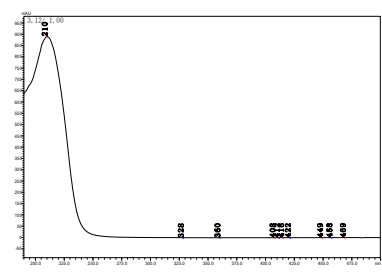
绿麦隆



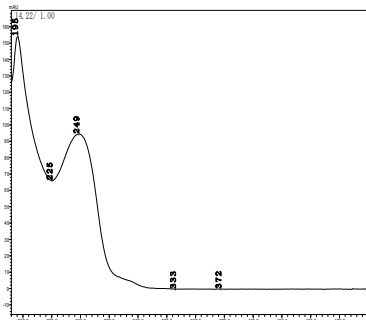
拌种灵



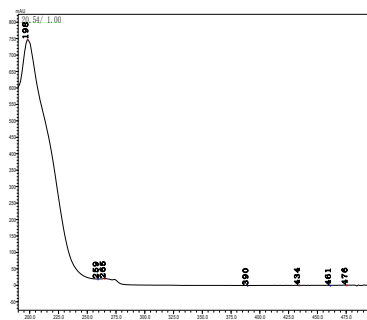
啉虫丙醚(三氯甲吡醚)



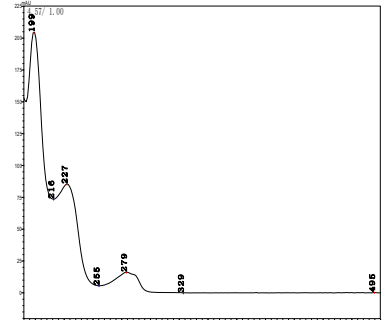
单氰胺



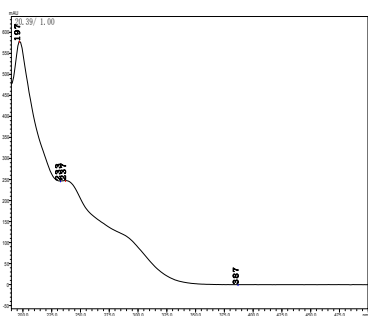
甲酰胺基嘧磺隆



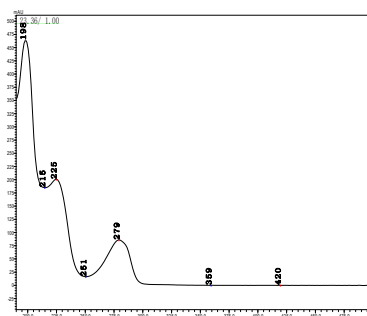
吡啶草胺



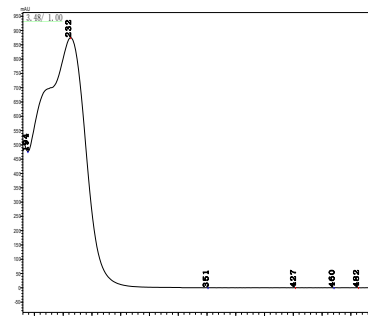
二甲四氯二甲胺盐



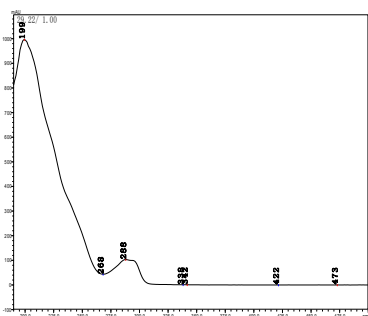
氟吗啉



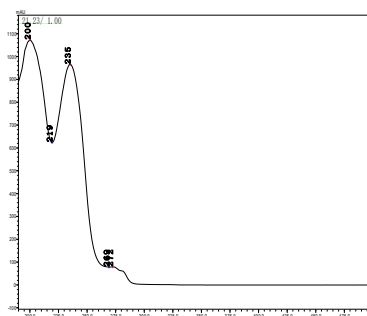
乙氧呋草胺



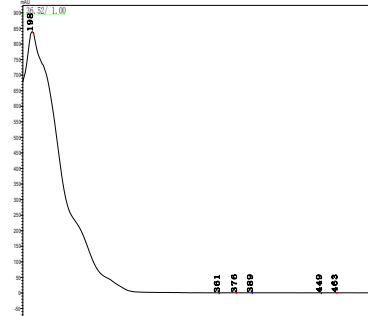
乙撑硫脲



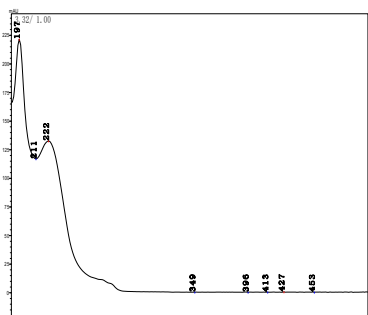
丙炔噁草酮



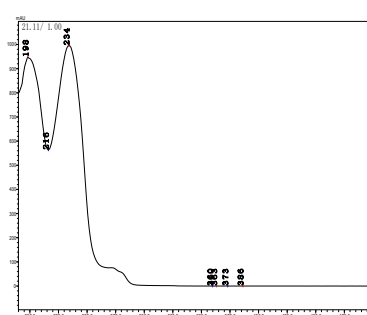
甜菜宁



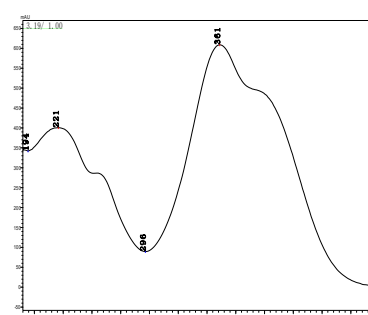
氟草烟酯



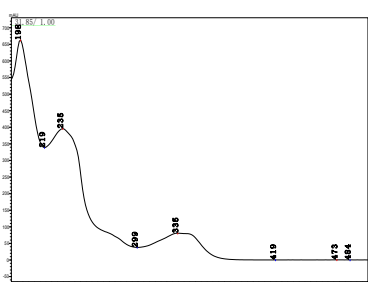
苯甲酸



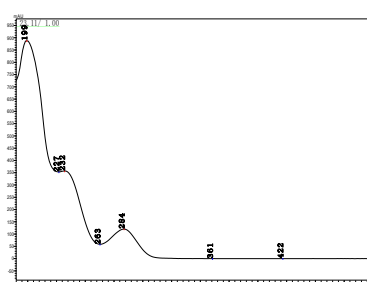
甜菜安



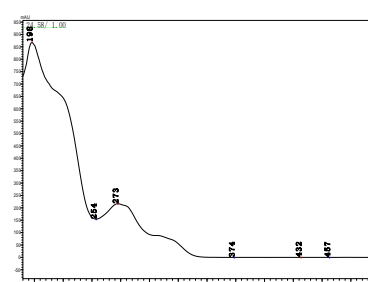
2,4-二硝基苯酚钠



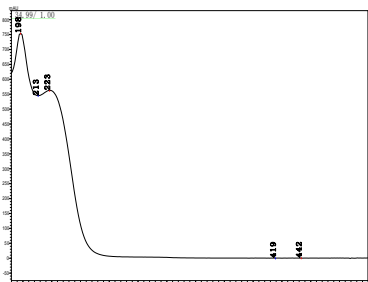
喹禾糖酯



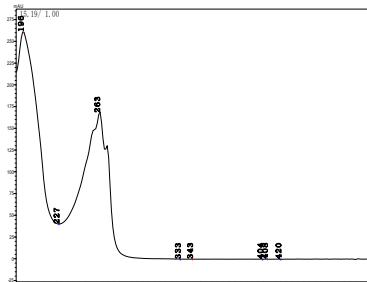
2,6-二乙基苯胺



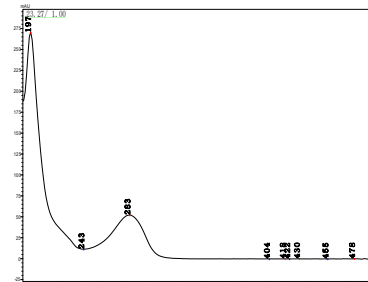
氟啶唑



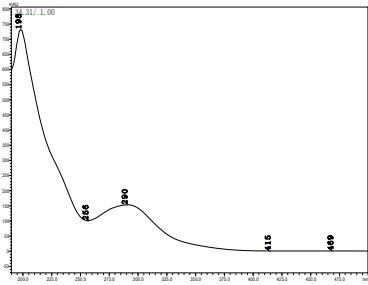
富右旋烯丙菊酯



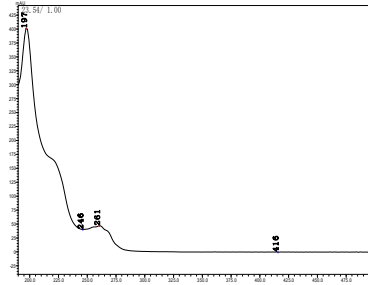
3-甲基吡啶



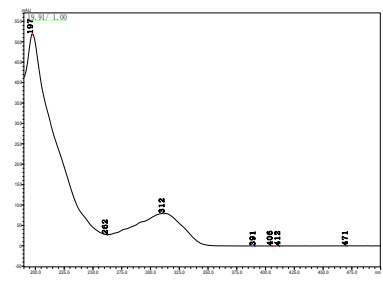
脞草酮



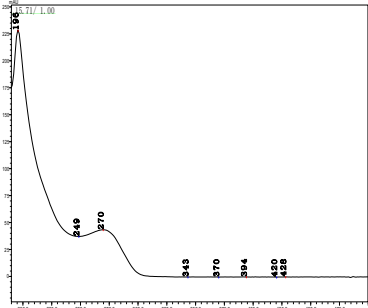
乳氟禾草灵



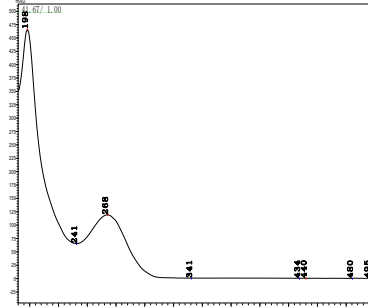
啶菌噁唑



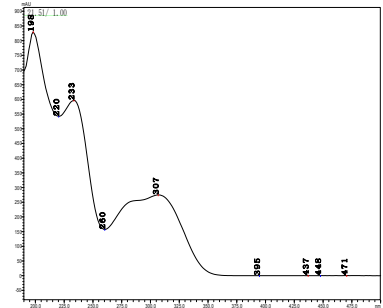
氟鼠灵



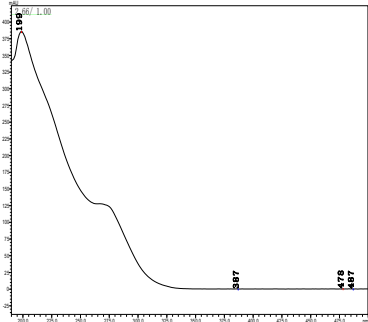
苯嘧磺草胺



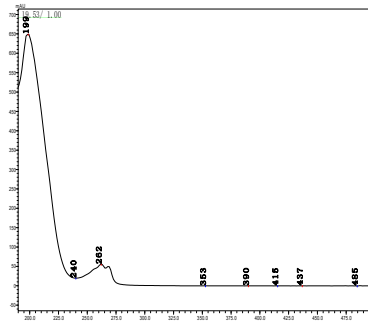
氟氰苯菊酯



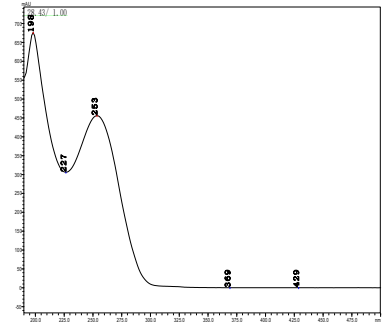
氟啶草酮



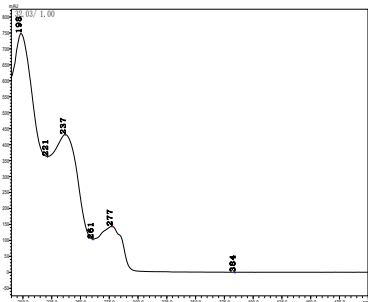
甲氧咪草烟



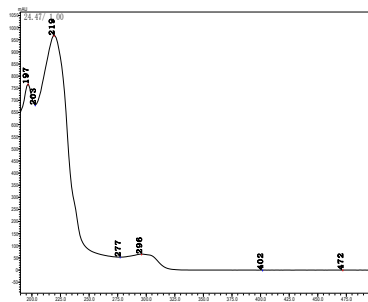
粉唑醇



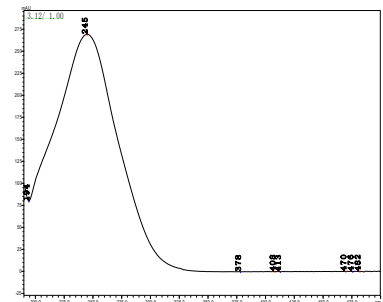
唑菌酯



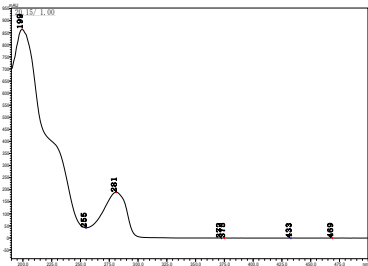
噁唑酰草胺



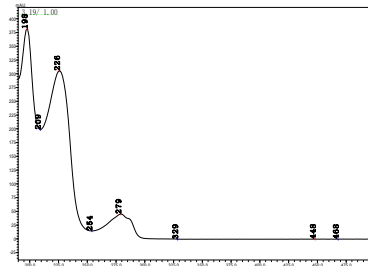
灭菌丹



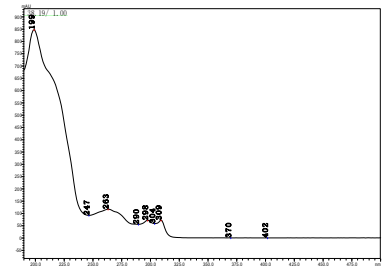
(+)-脱落酸



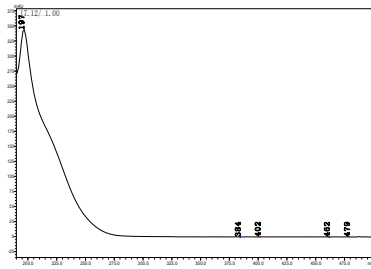
丁香酚



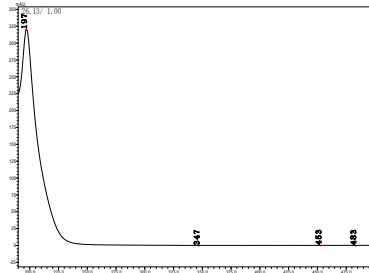
对氯苯氧酸钠



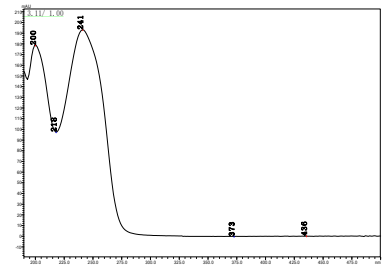
啶螨醚



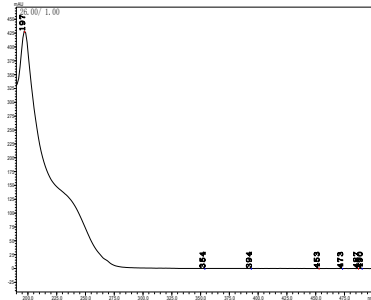
磷胺



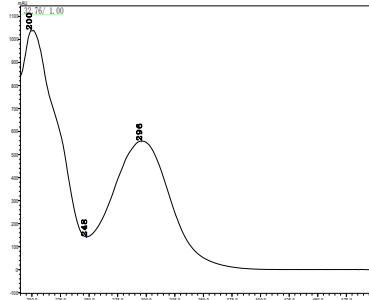
氯吡磷



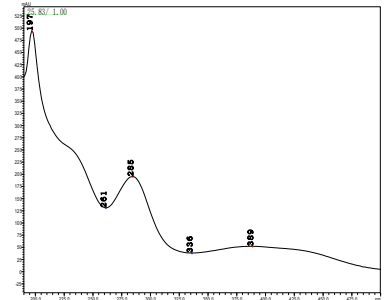
酰嘧磺隆



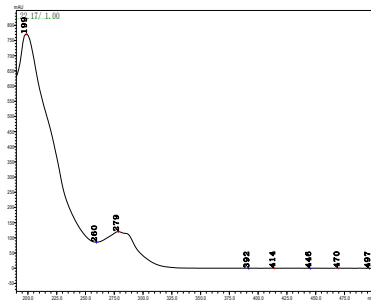
氟噻草胺



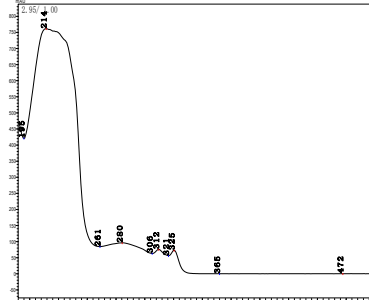
除草醚



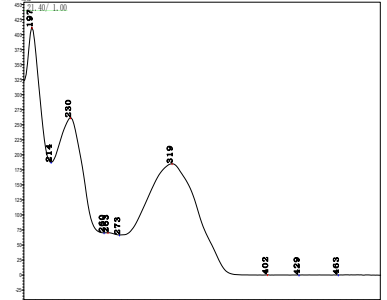
氨磺乐灵



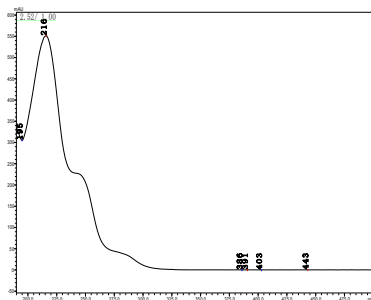
乙虫腈



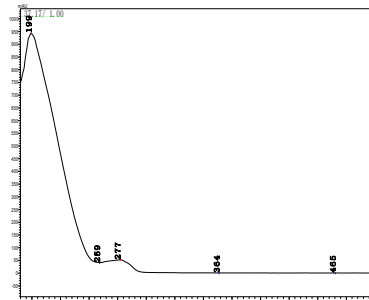
氯甲啶啉酸



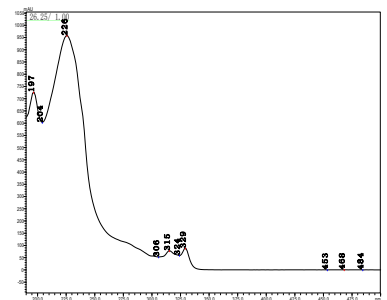
双丙环虫酯



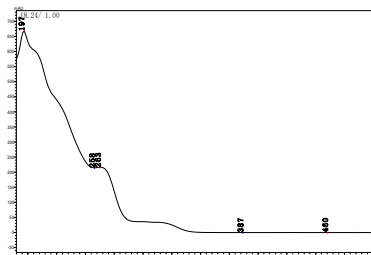
氯胺吡啶酸



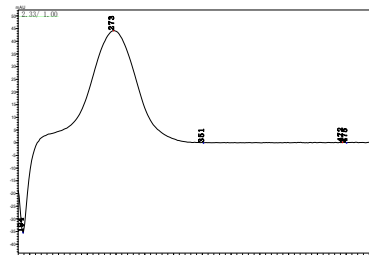
氯氟氰菊酯



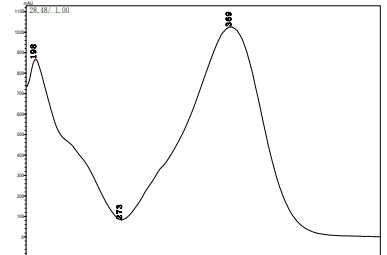
二氯啶啉草酮



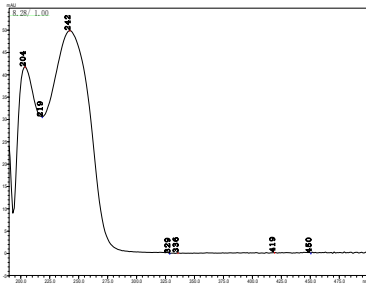
甲磺草胺



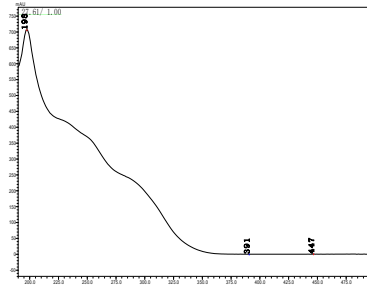
调环酸钙盐



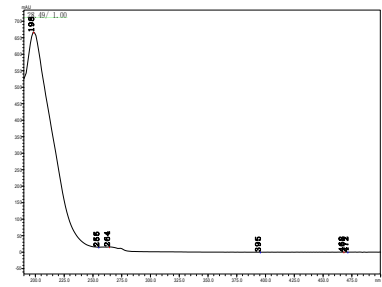
补骨脂乙素



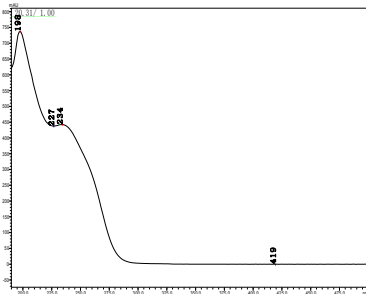
噻吡嘧磺隆



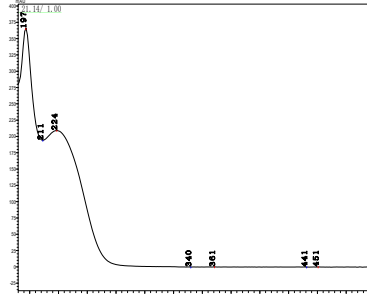
氟噻甲草酯



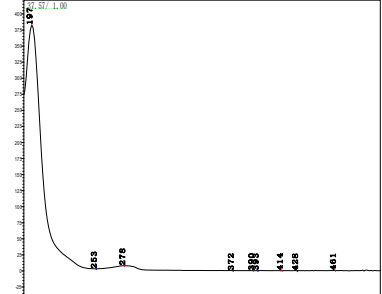
精苯霜灵



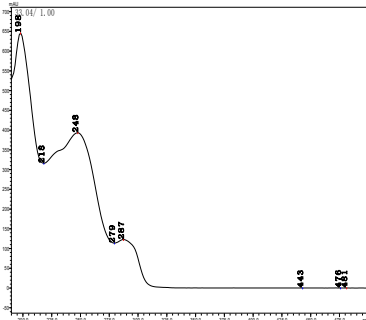
双唑草腈



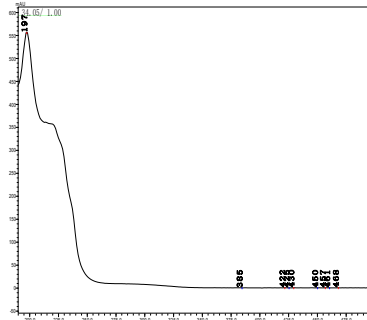
砒吡草唑



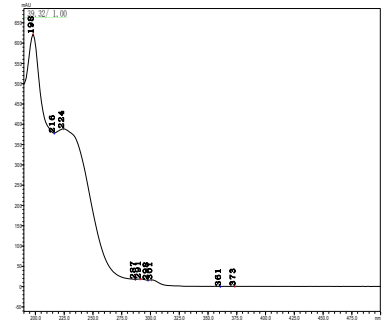
氟硅菊酯



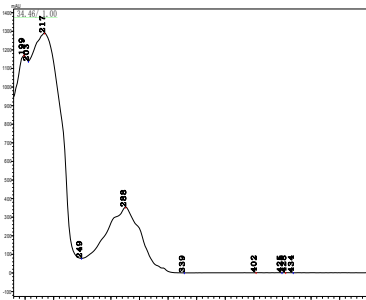
环戊噁草酮



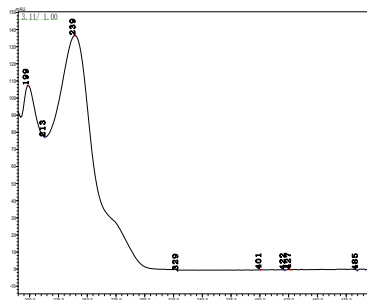
右旋胺菊酯



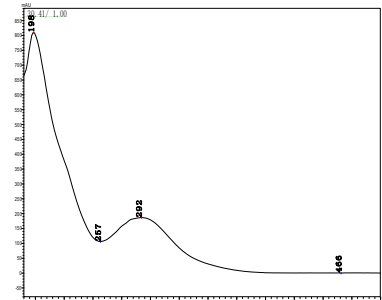
辛酰碘苯腈



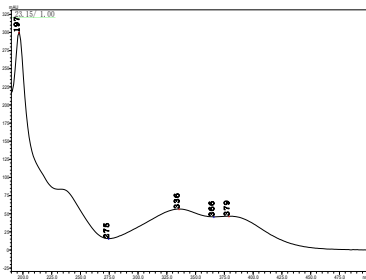
甲萘灵



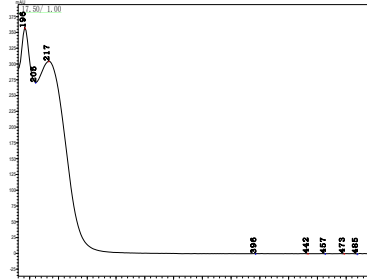
单嘧磺酯



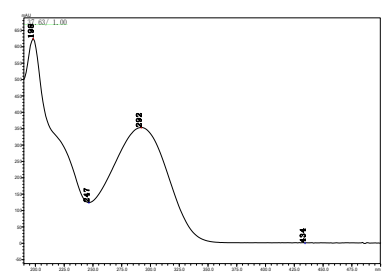
甲羧除草醚



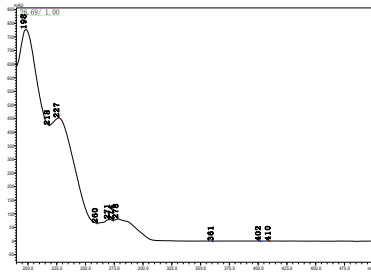
杀螺胺



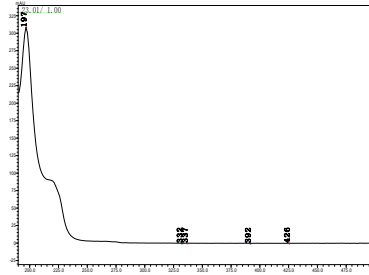
雷公藤甲素



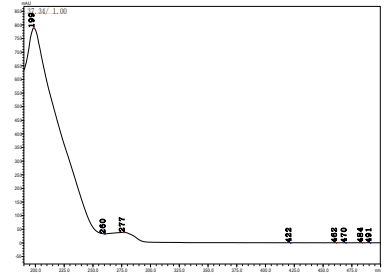
唑螨氰



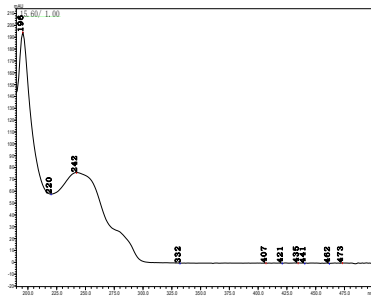
苯氧威



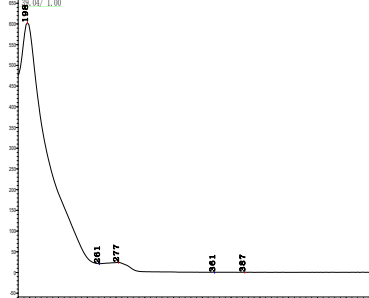
缬菌胺



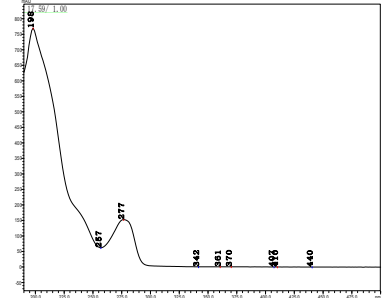
高效反式氯氰菊酯



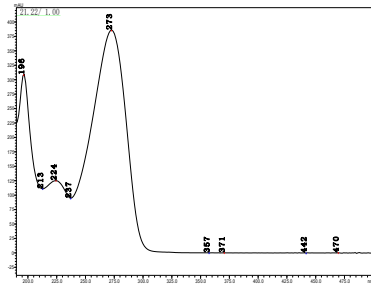
三氯吡啶磺隆钠



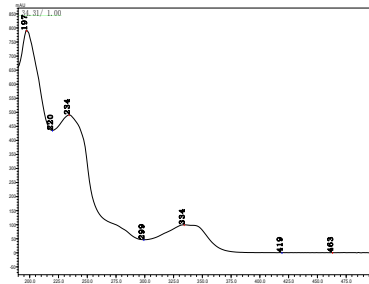
苯氟菊酯



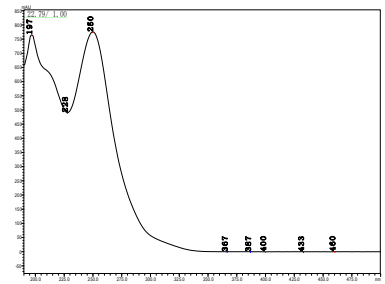
噁虫酮



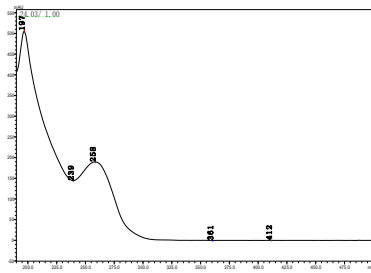
氟烯线砜



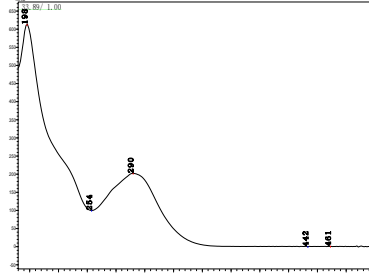
噁草酸



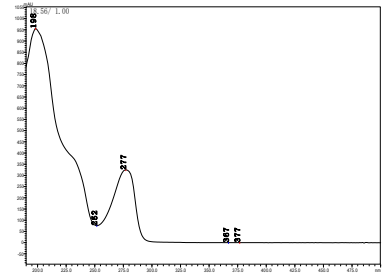
氟氯吡啶酯



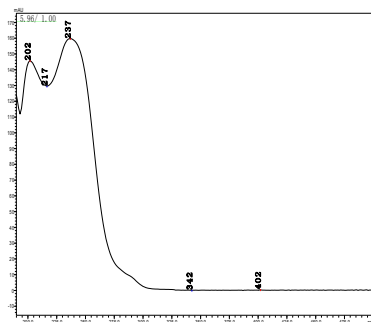
氟噻唑吡乙酮



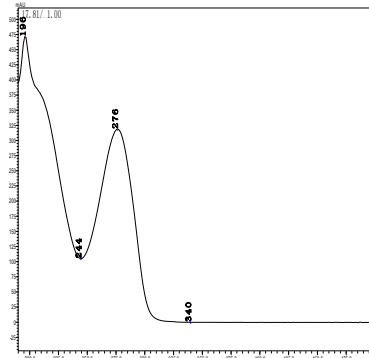
氟吡草胺



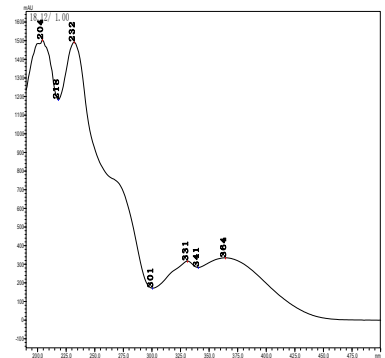
噁虫威



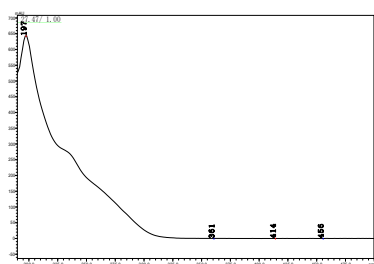
甲基碘磺隆钠盐



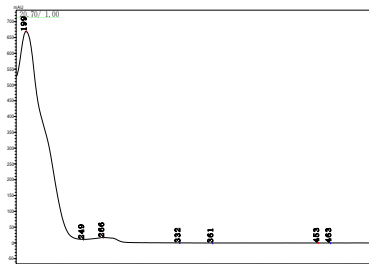
除草定



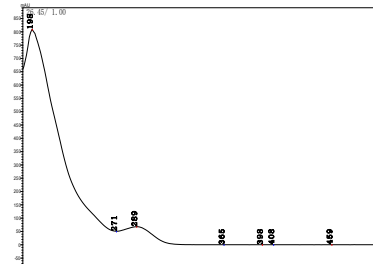
三氯苯嘧啶



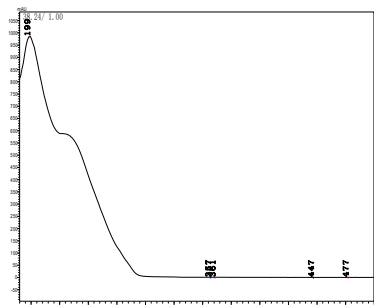
氟苯虫酰胺



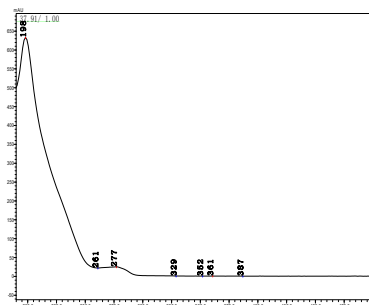
混灭威



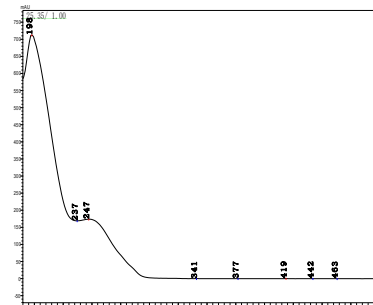
呋喃虫酰胺



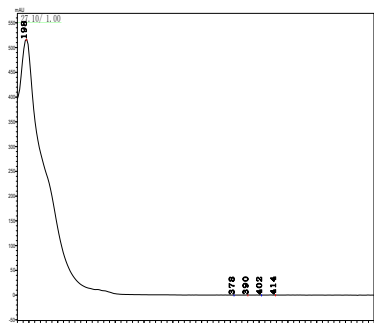
氟丙菊酯



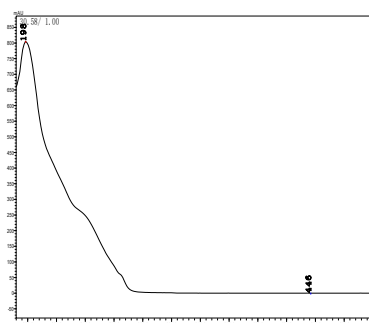
Zeta-氰氟菊酯



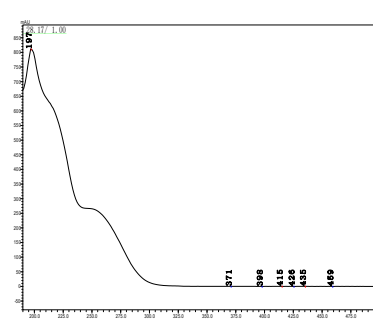
环虫酰胺



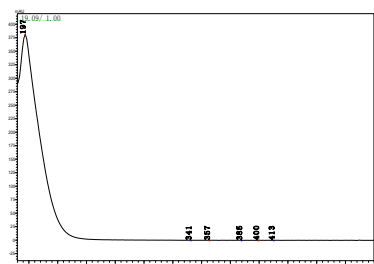
异稻瘟净



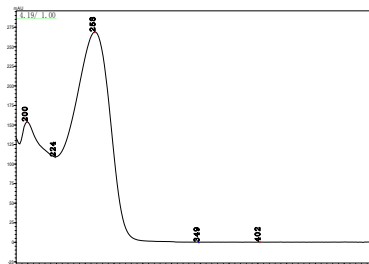
苯醚菊酯



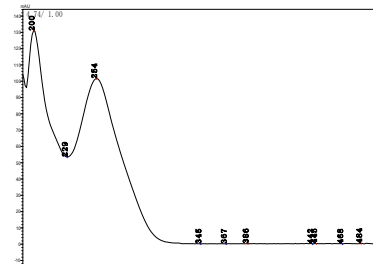
环虫酰胺



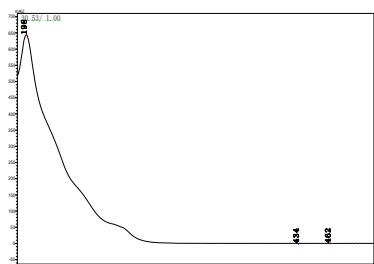
驱蚊酯



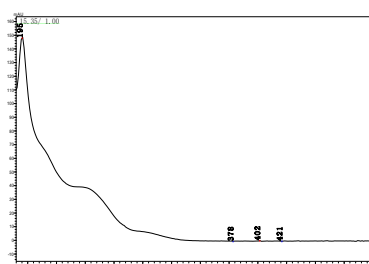
敌枯双



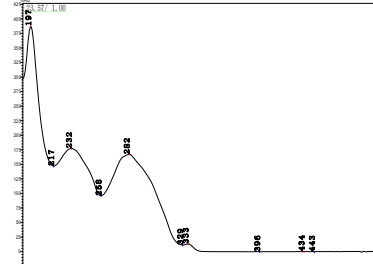
苯并烯氟菌唑



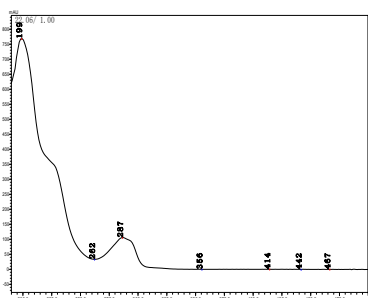
溴虫氟苯双酰胺



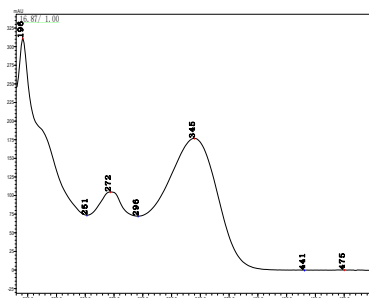
氯酯磺草胺



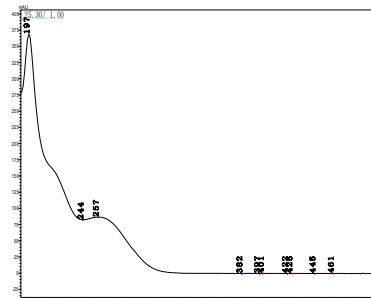
2,2':6',2''-三联吡啶



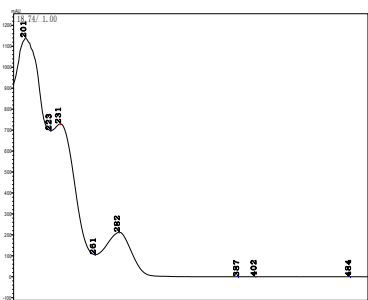
2-氯-4-溴苯酚



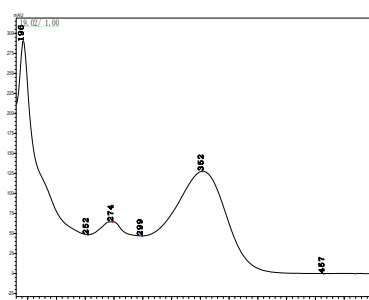
哌虫啉 1



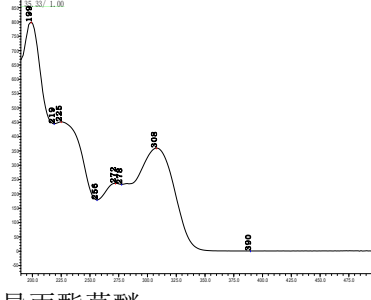
氟唑环菌胺



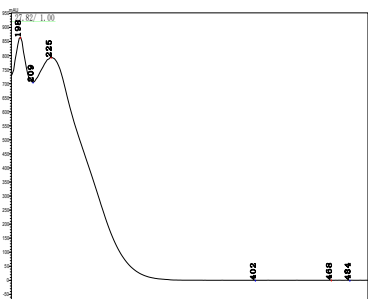
2,6-二甲基苯胺



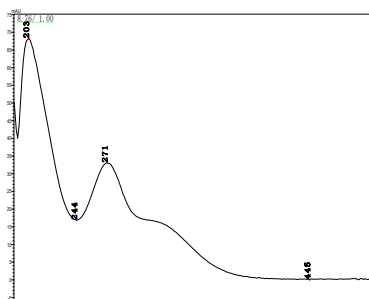
哌虫啉 2



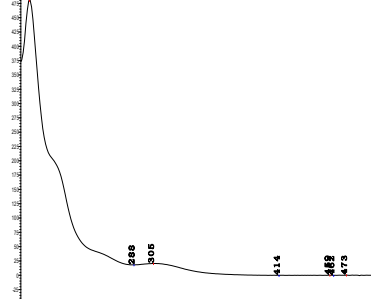
异丙酯草醚



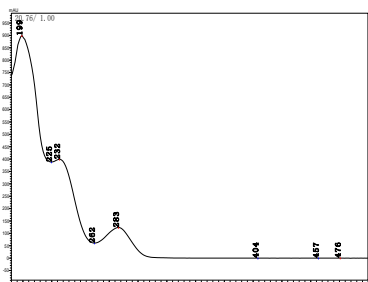
吡嗪菌胺



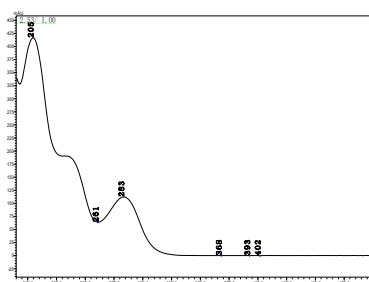
环吡氟草酮



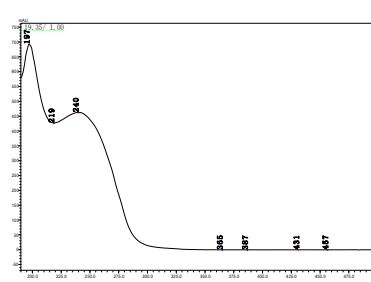
硝虫硫磷



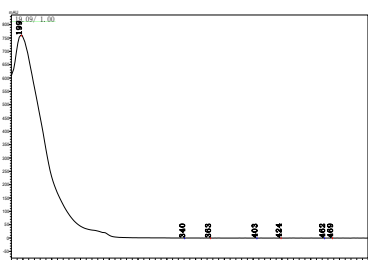
2-甲基-6-乙基苯胺



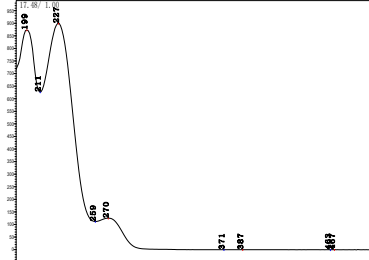
氯丙啉啉酸



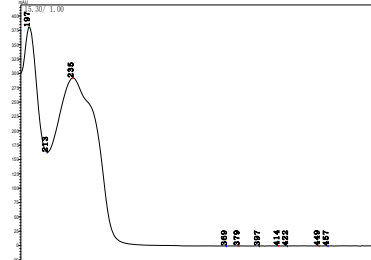
双啉草酮



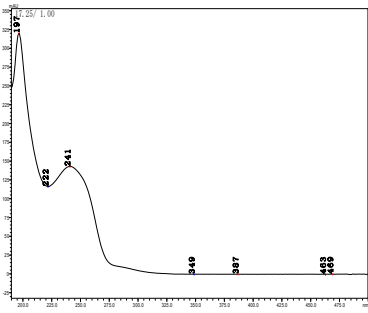
2-乙基-6-甲基-2-氯乙酰苯胺



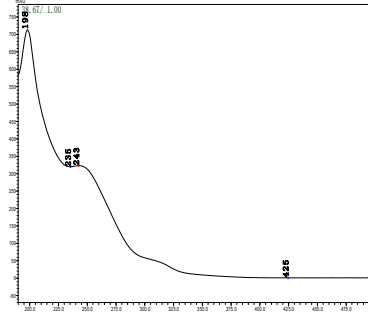
2,6-二氯苯胺



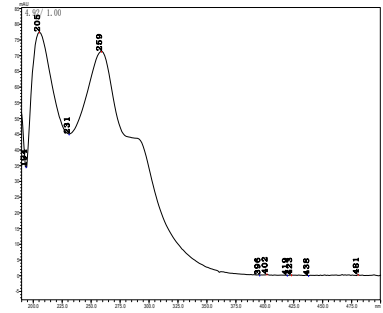
啉苯胺磺隆 1



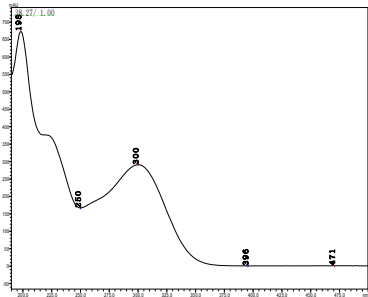
啉苯胺磺隆 2



硝苯菌酯



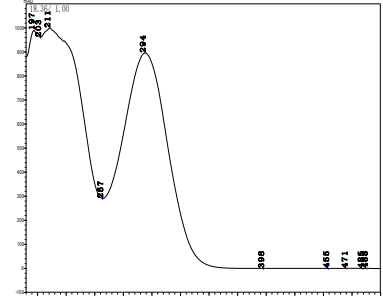
环磺酮



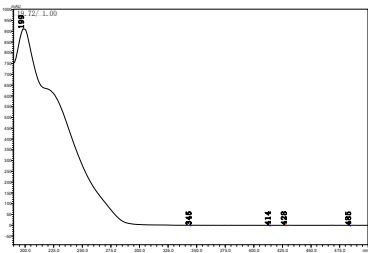
乙唑螨腈



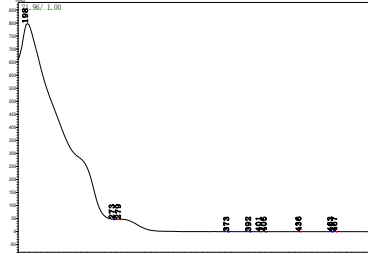
E-噁草醚



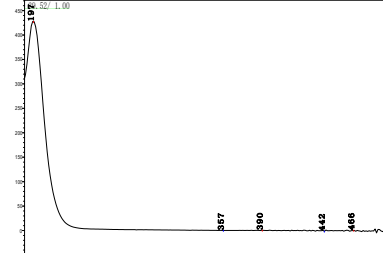
噁草酮



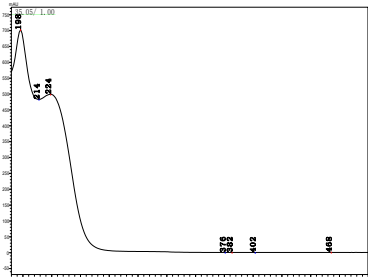
抑食肼



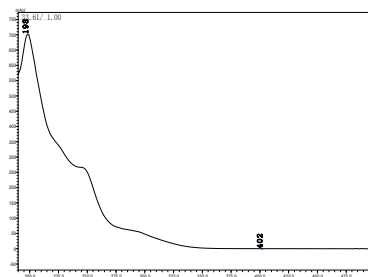
Z-噁草醚



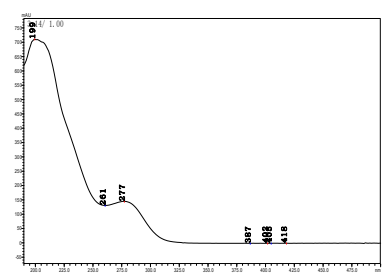
d-柠檬烯



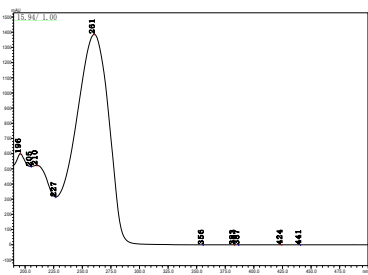
烯丙菊酯



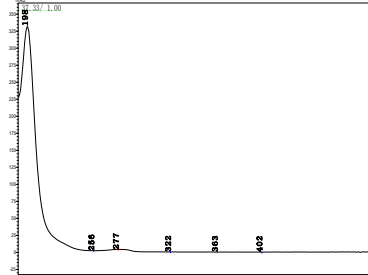
亚胺唑



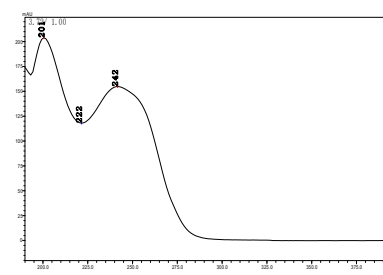
唑啉磺草胺



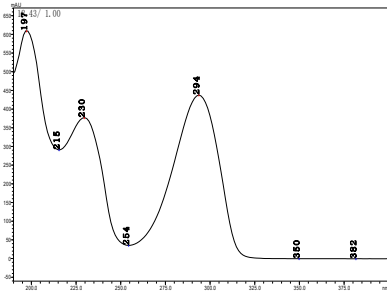
氟吡呋喃酮



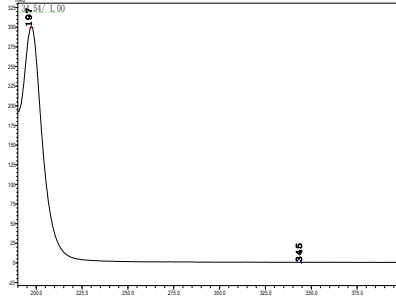
右旋烯炔菊酯



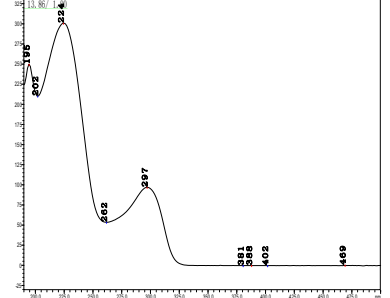
烟啉磺隆



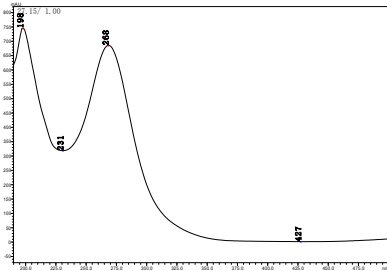
甲基吡噁磷



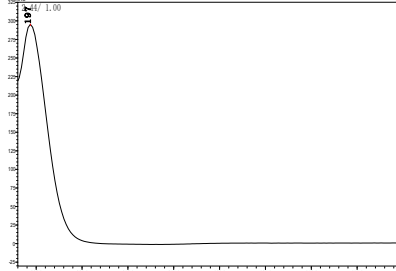
甲维盐



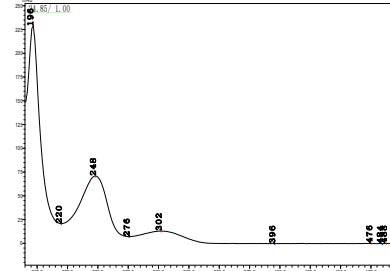
甲基嘧啶磷 I



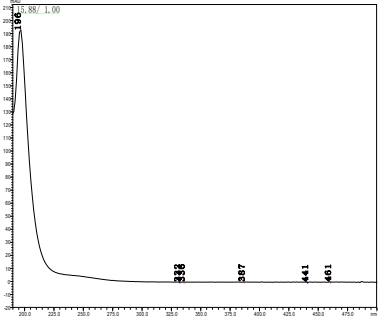
氟螨唑



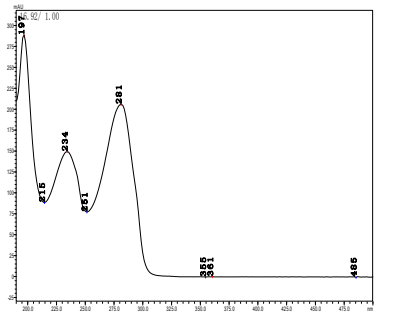
敌草快



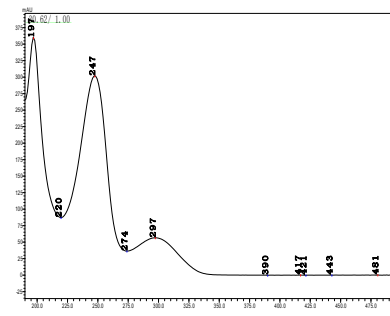
甲基嘧啶磷 II



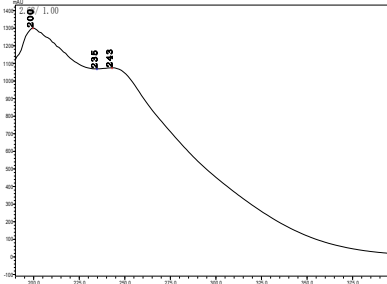
乙蒜素



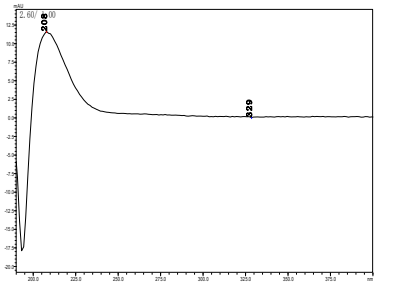
2,2-联吡啶



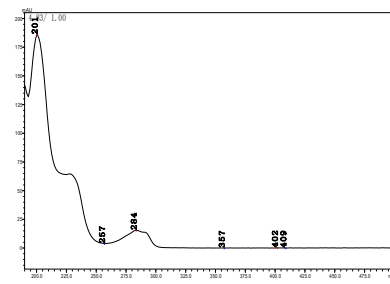
甲基嘧啶磷 III



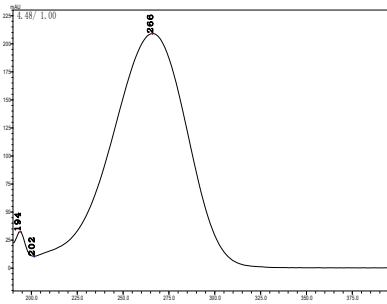
代森锰锌 I



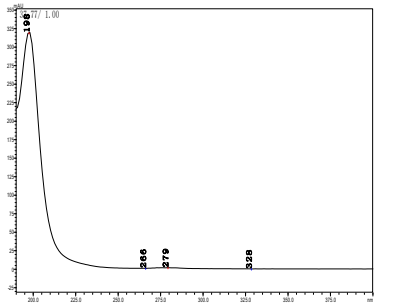
百草枯



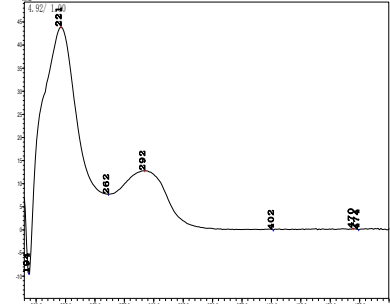
2,4-滴二甲铵盐



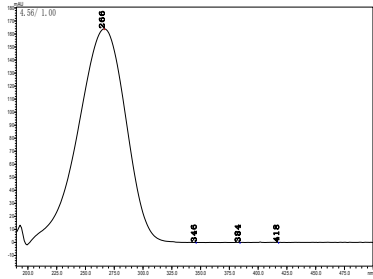
代森锰锌 II



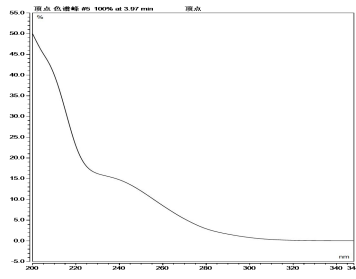
苯丁锡



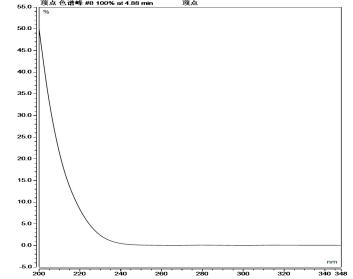
啶磺草胺



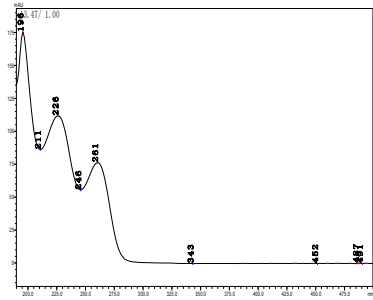
苄嘧磺隆 I



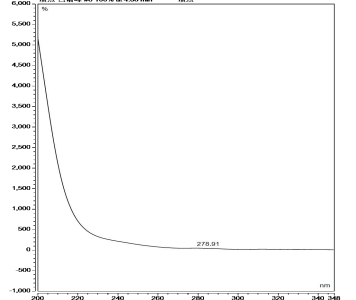
单甲脒 II



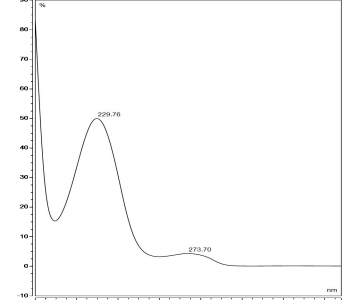
草甘膦



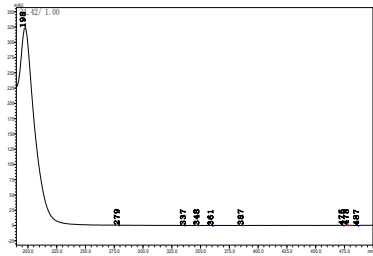
苄嘧磺隆 II



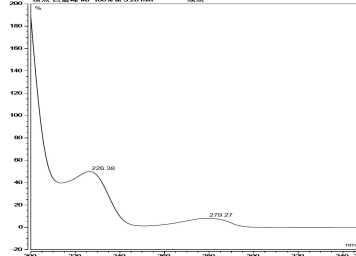
d-柠檬烯 I



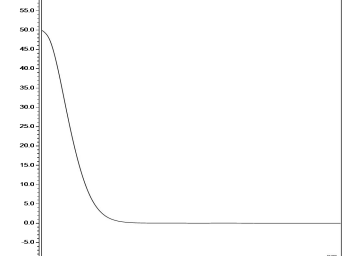
甲维盐



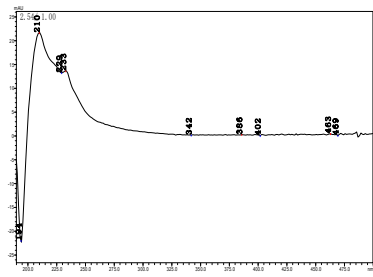
莪术醇



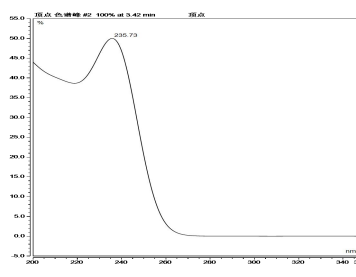
2 甲 4 氯



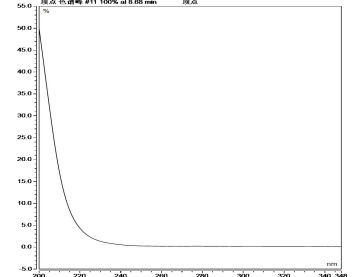
苦参碱



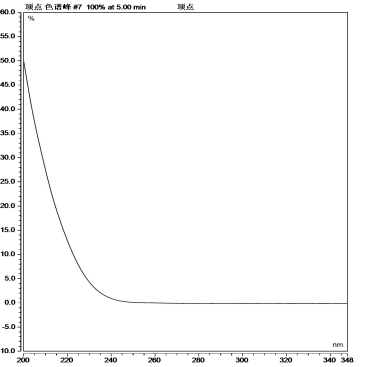
噻菌铜



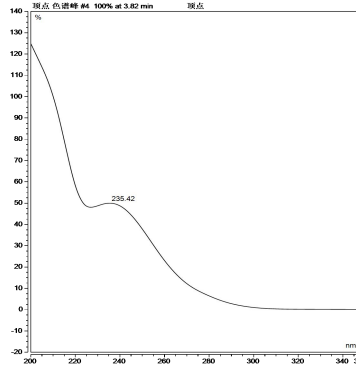
盐酸吗啉胍



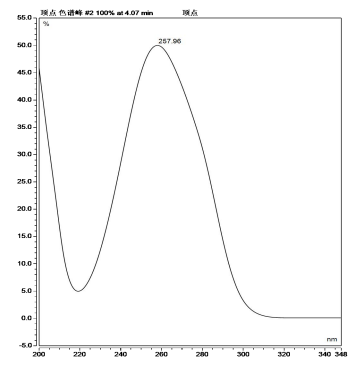
d-柠檬烯 II



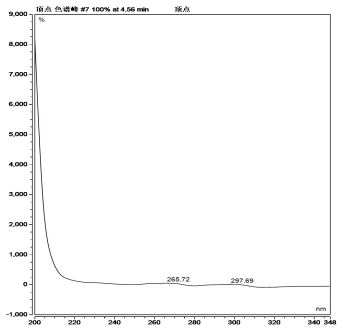
精草铵膦



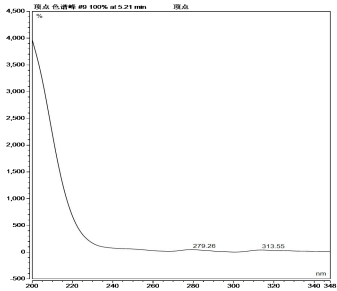
单甲脒 I



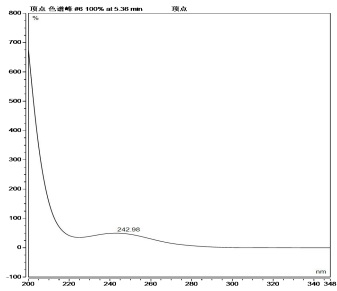
百草枯



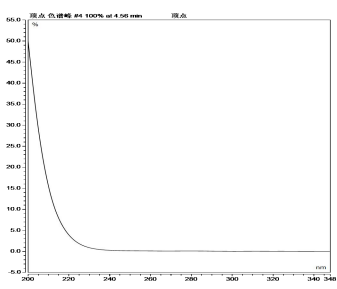
霜霉威 I



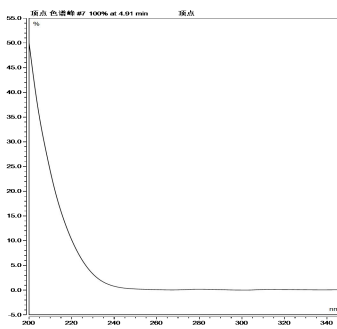
霜霉威 II



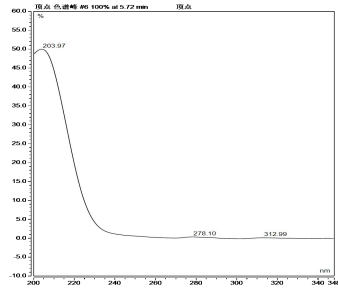
杀虫单



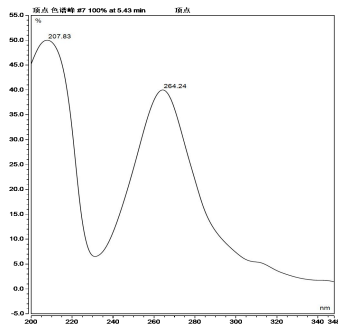
敌百虫



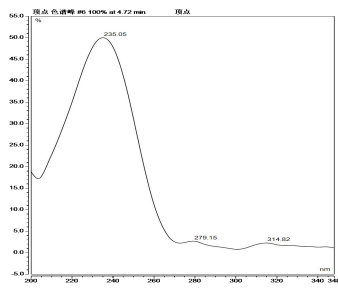
草铵膦



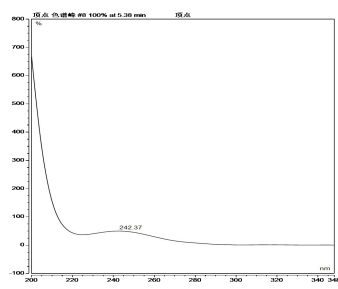
治螟磷



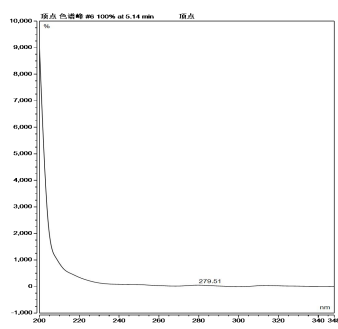
氟虫胺



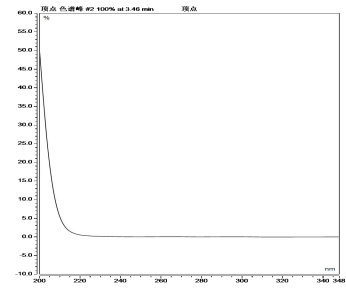
辛菌胺



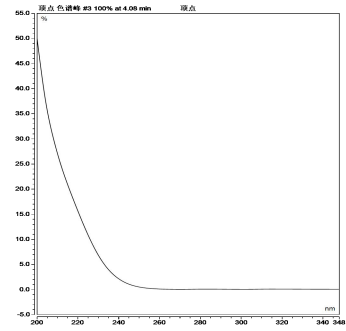
杀虫双



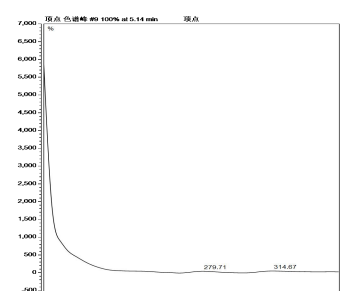
甲萘酚



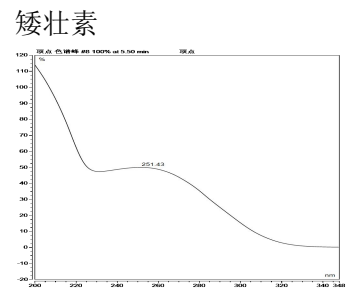
链霉素



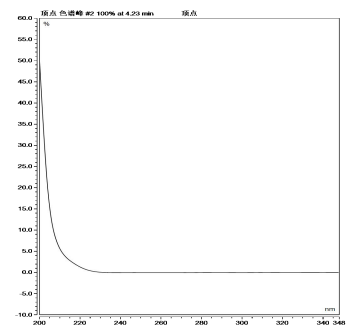
丁酰肼



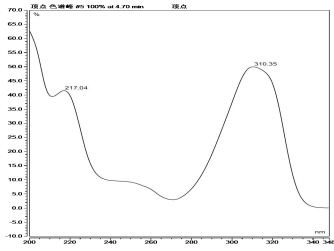
矮壮素



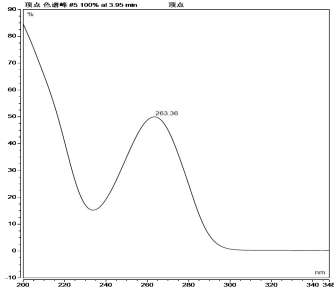
甲基咪草烟



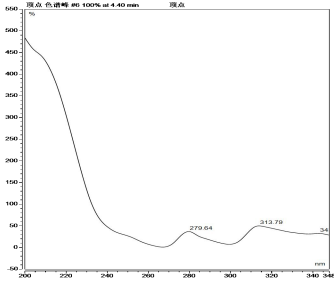
氯溴异氰尿酸



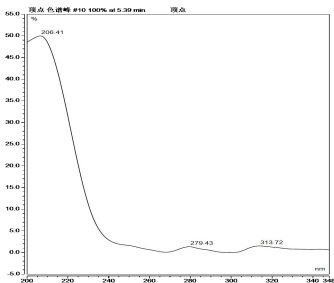
敌草快



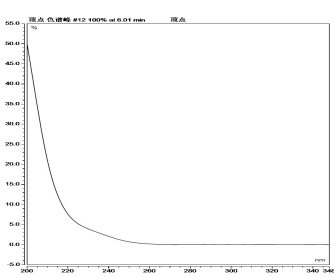
多抗霉素 B



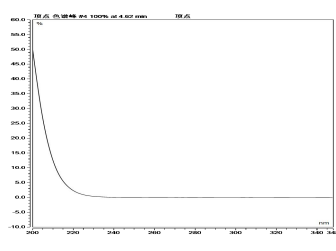
胺鲜酯柠檬酸盐



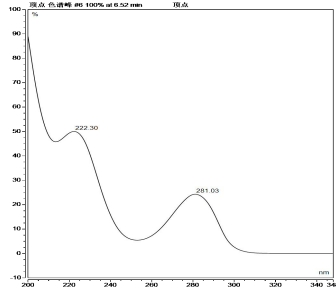
胺鲜酯



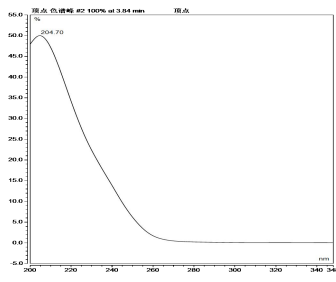
异乐果



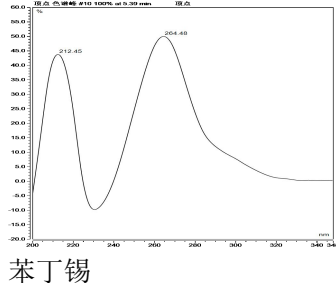
四聚乙醛



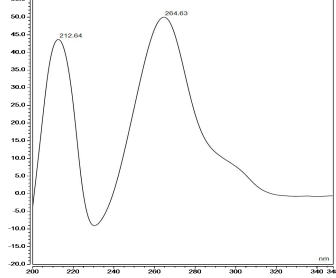
二氯吡啶酸



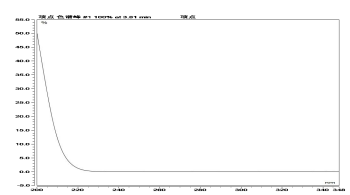
春雷霉素



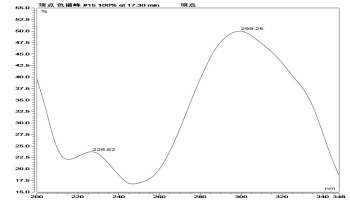
苯丁锡



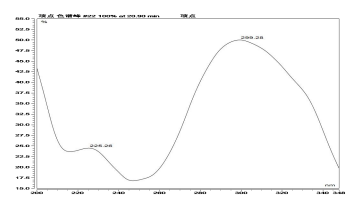
灭蚁灵



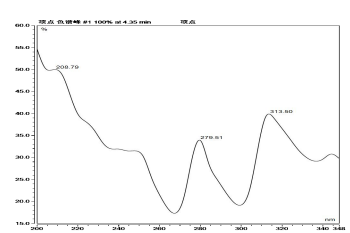
井冈霉素 A



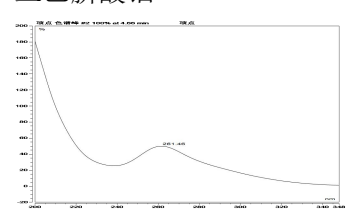
氟蚁腓 I



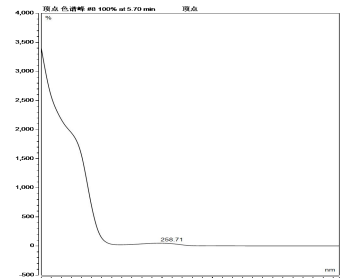
氟蚁腓 II



三乙膦酸铝



杀虫环



三苯基乙酸锡
