

Positive list system simultaneous test method compliant

# Pesticides Standard Solution



Kanto Reagents



# Pesticides Standard Solution

## LC/MS • GC/MS







# Pesticides standard solution

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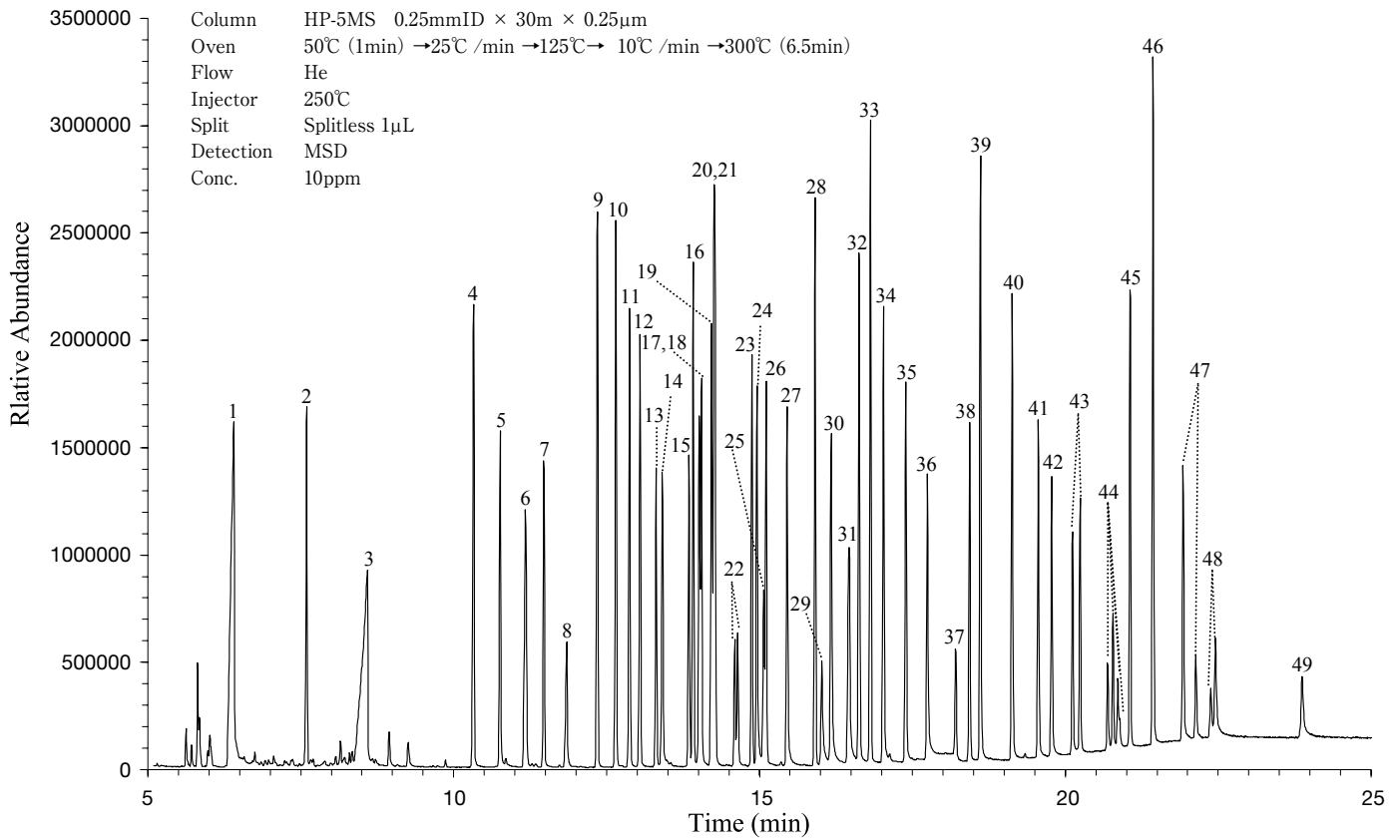
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### Simultaneous test method for agrochemical etc. by LC/MS

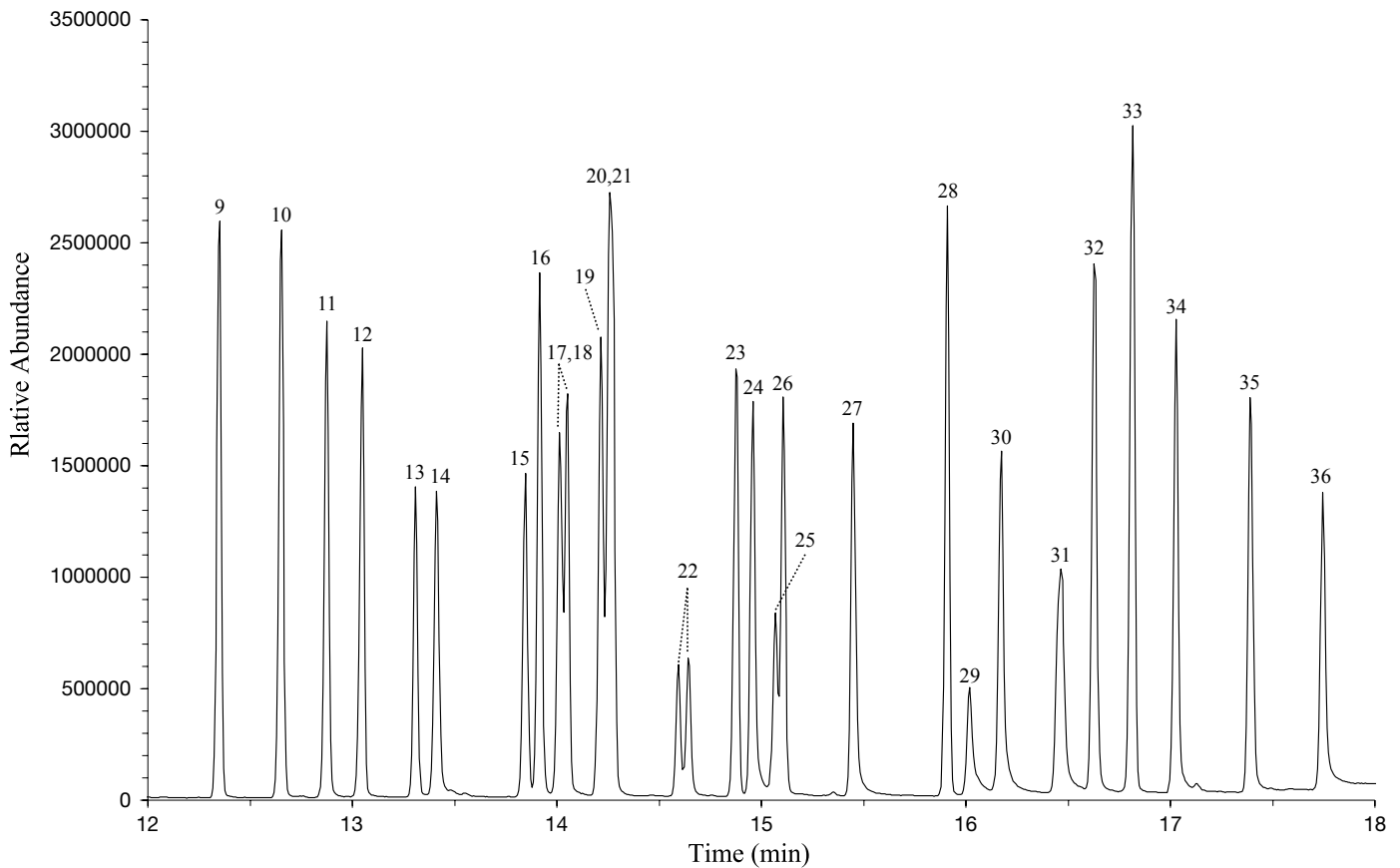
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# Pesticides standard solution 61

## ▶ Example of analysis of Pesticides standard solution 61



## ▶ ZOOM(No.9~36)



Peak No.	Product name	RT( min )	Monitor Ion( m/z )				Catalog No.	packing
			1	2	3	4		
1	Methamidophos	6.41	94				49801 -46	100 mg
2	EPTC	7.60	128				49802 -30	250 mg
3	Acephate	8.59	136				49801 -00	250 mg
4	Fenobucarb( BPMC )	10.33	121	150			16006 -96	50mg
5	Chlorpropham	10.76	213	154	127		07325 -96	200 mg
6	Cadusafos	11.17	270	213	159	158	49830 -48	100 mg
7	Thiometon	11.47	246	158	125	88	49801 -73	100 mg
8	Dimethipin	11.85	54				49801 -29	100 mg
9	Diazinon	12.35	304	179	152	137	49801 -25	250 mg
10	Etrimfos	12.66	292	277	181		49801 -34	100 mg
11	Pirimicarb	12.88	166	238			49801 -56	250 mg
12	Benfuresate	13.05	256	163			49828 -00	100 mg
13	Parathion-methyl	13.31	263	233	125		49801 -53	100 mg
14	Carbaryl	13.41	144				07143 -96	200 mg
15	Fenitrothion	13.85	277	260	247		49801 -35	250 mg
16	Esprocarb	13.92	222	162			14010 -96	200 mg
17	Dichlofluanid	14.01	123	224			49801 -26	250 mg
18	Thiobencarb	14.05	257	125	100		40112 -96	200 mg
19	Fenthion	14.21	278	169			49801 -79	250 mg
20	Chlorpyrifos	14.26	314	286	197		49801 -16	250 mg
21	Parathionl	14.26	291	261	235		49802 -59	100 mg
22-1	Fosthiazate-1	14.60	283	195			49829 -53	30mg
22-2	Fosthiazate-2	14.64	283	195			49829 -53	30mg
23	Pendimethalin	14.87	281	252			32042 -96	200 mg
24	Z -Pyrifenox	14.96	262	187	171		32510 -96	200 mg
25	Captan	15.07	79	149			07137 -96	200 mg
26	Phenthoate	15.11	274	246			49801 -85	100 mg
27	E -Pyrifenox	15.45	262	187	171		49860 -37	10 ppm/1 mL IO*
28	Prothiophos	15.91	309	267			49801 -61	50mg
29	Tricyclazole	16.02	189	162	161		49802 -57	100 mg
30	Myclobutanil	16.17	179	152	150		49801 -49	100 mg
31	Cyproconazole	16.47	222	139			49802 -28	100 mg
32	Chlorobenzilate	16.63	251	139			49801 -13	100 mg
33	p, p'-DDD	16.82	237	235	178	165	49802 -25	250 mg
34	Mepronil	17.03	269	119			25095 -97	100 mg
35	Edifenphos	17.39	310	173			49861 -23	250 mg
36	Tebuconazole	17.75	250	125			40511 -96	100 mg
37	Iprodione	18.21	314				20301 -96	200 mg
38	EPN	18.44	185	169	157		49801 -30	100 mg
39	Tebufenpyrad	18.61	333	318			49828 -33	100 mg
40	Pyriproxyfen	19.13	226	136			49827 -95	100 mg
41	Acrinathrin	19.56	289	208	181		49802 -02	100 mg
42	Pyraclufos	19.78	360	194			34070 -96	100 mg
43-1	Permethrin-1	20.12	183	163			49801 -54	250 mg
43-2	Permethrin-2	20.24	183	163			49801 -54	250 mg
44-1	Cyfluthrin-1	20.70	226	206	163		49801 -18	250 mg
44-2	Cyfluthrin-2	20.78	226	206	163		49801 -18	250 mg
44-3	Cyfluthrin-3	20.86	226	206	163		49801 -18	250 mg
44-4	Cyfluthrin-4	20.90	226	206	163		49801 -18	250 mg
45	Halfenprox	21.06	265	263	183		49831 -27	10mg
46	Silafluofen	21.43	179				49833 -06	100 mg
47-1	Fenvalerate-1	21.93	419	167	125		49801 -37	250 mg
47-2	Fenvalerate-2	22.14	419	167	125		49801 -37	250 mg
48-1	Difenoconazole-1	22.38	323	265			49834 -09	250 mg
48-2	Difenoconazole-2	22.46	323	265			49834 -09	250 mg
49	Imibenconazole	23.87	253	250	125	375	49861 -52	100 mg

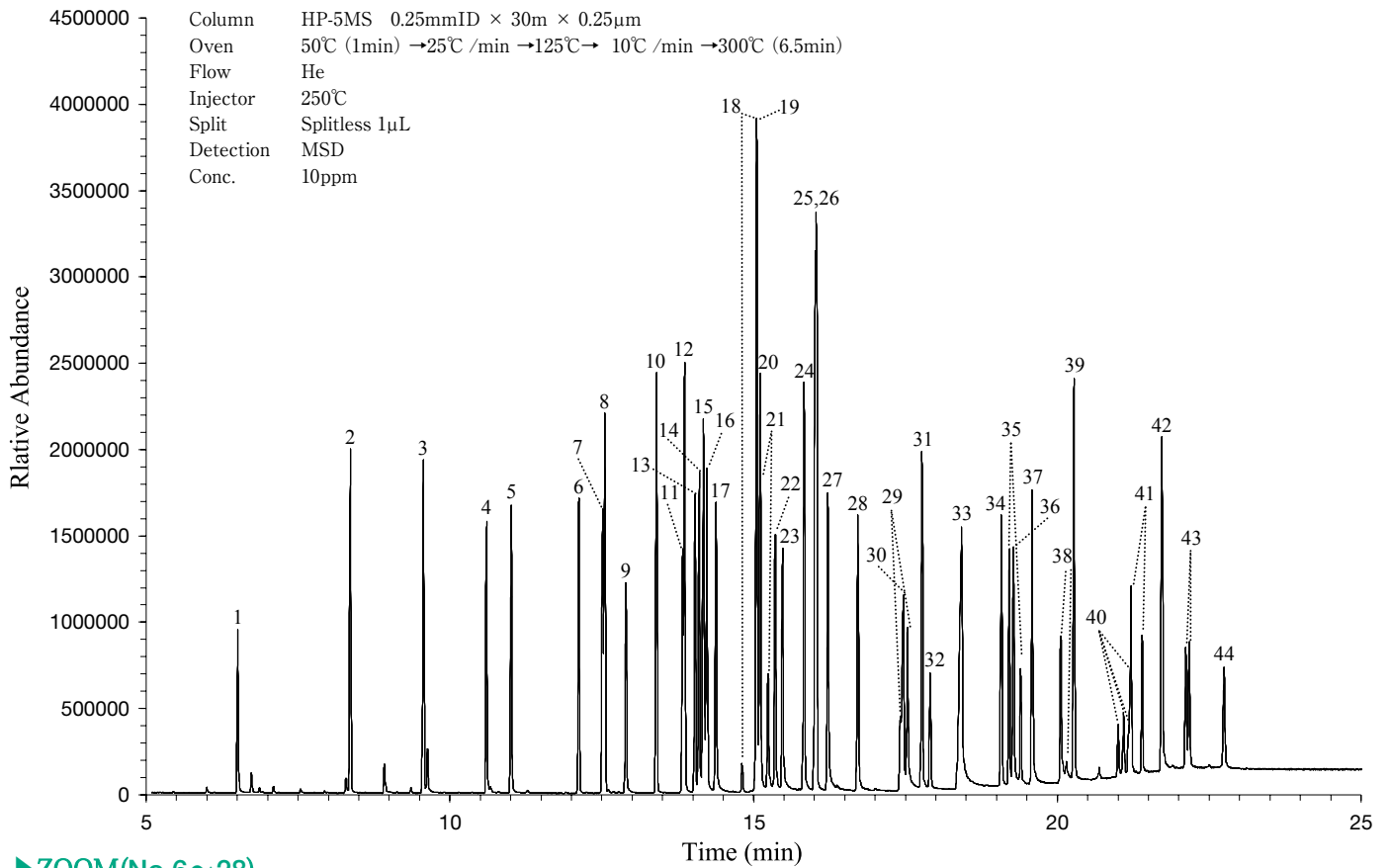
\* IO : Isocdane solution

Catalog No.	Product Name	Number of ingredient	Grade	Packing
34274-96 34274-97	<i>Pesticides standard solution 61</i>	49	For pesticide residue analysis	5 mL×5 5 mL×1

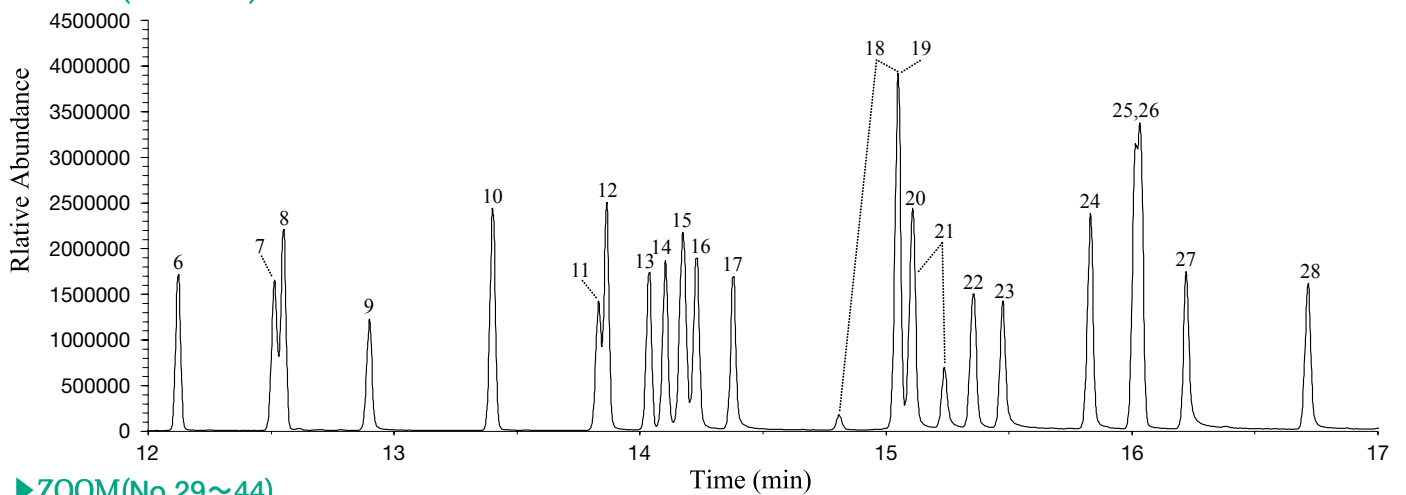
( 50mg/L of acephate and methamidophos and 10mg/L of each other chemicals contained in acetone solution, Freeze storage )

# Pesticides standard solution 63

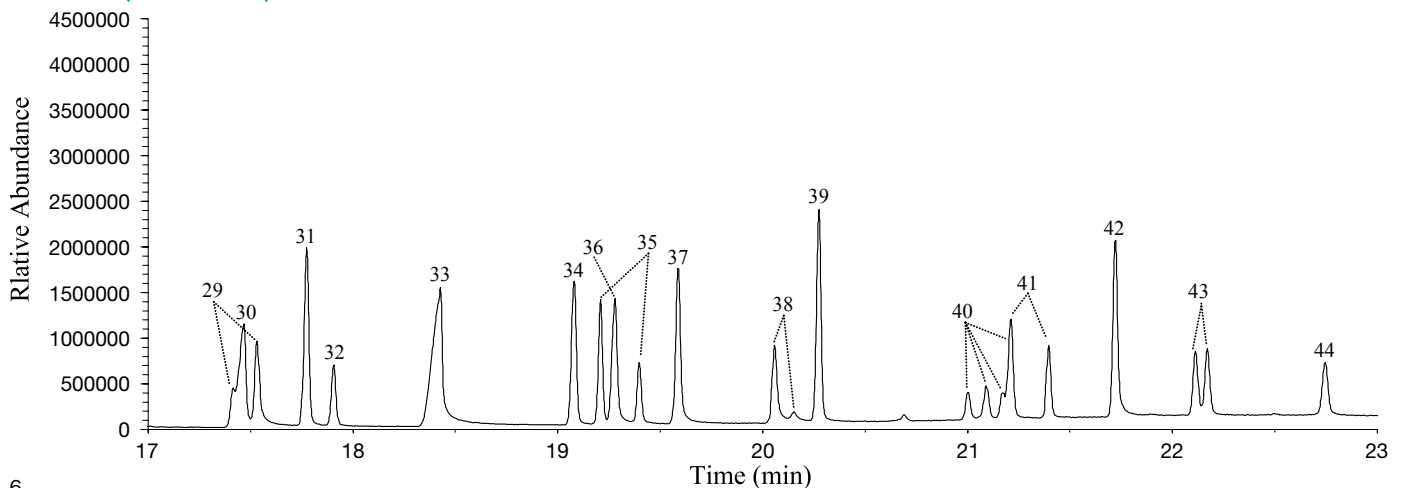
## ▶ Example of analysis of Pesticides standard solution 63



### ▶ ZOOM(No.6~28)



### ▶ ZOOM(No.29~44)



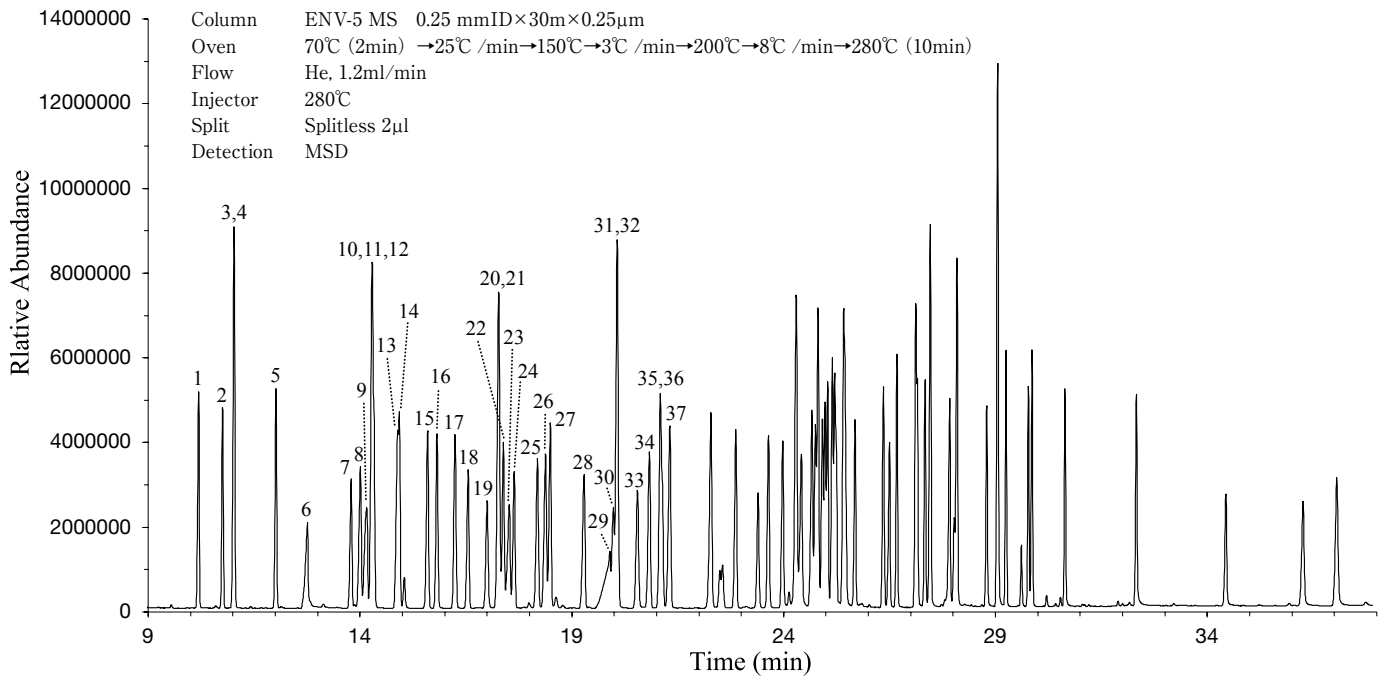
Peak No.	Product name	RT( min )	Monitor Ion( m/z )				Catalog No.	Packing
			1	2	3	4		
1	Dichlorvos	6.50	109	185			10181 -96	200 mg
2	Butylate	8.36	146				49802 -32	250 mg
3	Isoprocarb	9.56	263	136	125	121	49801 -41	100 mg
4	Ethoprophos	10.61	200	158	139		49801 -32	100 mg
5	Bendiocarb	11.01	151				49801 -04	250 mg
6	Terbufos	12.13	288	231	153		49801 -72	100 mg
7	δ -HCH	12.51	219	183	181		49802 -36	50mg
8	Tefluthrin	12.55	383	197	177		49801 -70	100 mg
9	Ethiofencarb	12.90	107	168			49801 -31	100 mg
10	Tolclofos-methyl	13.40	267	265			40175 -96	200 mg
11	Methiocarb	13.83	168				49801 -45	100 mg
12	Pirimiphos-methyl	13.87	305	290			49801 -57	250 mg
13	Malathion	14.04	173	158			49801 -43	100 mg
14	Diethofencarb	14.10	267	225	124		49801 -27	100 mg
15	Metolachlor	14.18	238	162			25149 -96	200 mg
16	Z -Dimethylvinphos	14.23	297	295	204		49835 -77	50mg
17	Isofenphos-oxon	14.38	229	201	120		49833 -17	10mg
18-1	Chlorfenvinphos-1	14.81	323	269	267	325	49833 -10	250 mg
18-2	Chlorfenvinphos-2	15.05	323	269	267	325	49833 -10	250 mg
19	Isofenphos	15.05	255	213	121	345	49801 -40	100 mg
20	Quinalphos	15.11	157	156	146	118	49801 -66	250 mg
21-1	Triadimenol-1	15.11	168	128	112		49801 -76	250 mg
21-2	Triadimenol-2	15.24	168	128	112		49801 -76	250 mg
22	Chinomethionat	15.36	234	206			49801 -10	250 mg
23	Paclbutrazol	15.48	236	167	125		49826 -38	100 mg
24	Flutolanil	15.83	323	173	145		49827 -92	100 mg
25	Pretilachlor	16.02	262	238	162		32587 -96	200 mg
26	p , p '-DDE	16.03	318	246			10038 -96	100 mg
27	Flusilazole	16.22	233	206			49802 -07	100 mg
28	Fensulfothion	16.72	308	293	156	292	49830 -23	100 mg
29-1	Propiconazole-1	17.42	302	259	256	173	32588 -96	200 mg
30	Lenacil	17.47	153	136	110		49801 -42	100 mg
29-2	Propiconazole-2	17.53	259	173			32588 -96	200 mg
31	Thenylchlor	17.77	288	127			49863 -48	10mg
32	Captafol	17.91	79	313			49801 -08	250 mg
33	Acetamiprid	18.43	166	152			01695 -96	200 mg
34	Phosalone	19.08	367	182			32181 -96	100 mg
35-1	Cyhalothrin-1	19.21	449	197	181		49801 -19	100 mg
36	Mefenacet	19.28	298	192	120		25092 -96	200 mg
35-2	Cyhalothrin-2	19.40	449	197	181		49801 -19	100 mg
37	Fenarimol	19.59	219	139			16010 -96	200 mg
38-1	Bitertanol-1	20.06	268	170	168		49801 -06	250 mg
38-2	Bitertanol-2	20.16	268	170	168		49801 -06	250 mg
39	Pyridaben	20.28	309	147			49801 -63	25 mg
40-1	Cypermethrin-1	21.00	181	163			49801 -21	100 mg
40-2	Cypermethrin-2	21.09	181	163			49801 -21	100 mg
40-3	Cypermethrin-3	21.19	181	163			49801 -21	100 mg
40-4	Cypermethrin-4	21.21	181	163			49801 -21	100 mg
41-1	Flucythrinate-1	21.21	451	199	157		49833 -92	100 mg
41-2	Flucythrinate-2	21.39	451	199	157		49833 -92	100 mg
42	Pyrimidifen	21.72	184				34052 -96	100 mg
43-1	Fluvalinate-1	22.11	252	250			16057 -96	200 mg
43-2	Fluvalinate-2	22.17	252	250			16057 -96	200 mg
44	Deltamethrin	22.75	253	181			49801 -24	250 mg

Catalog No.	Product name	Number of ingredient	Grade	Packing
34276-96 34276-97	<i>Pesticides standard solution 63</i>	44	For pesticide residue analysis	5 mL×5 5 mL×1

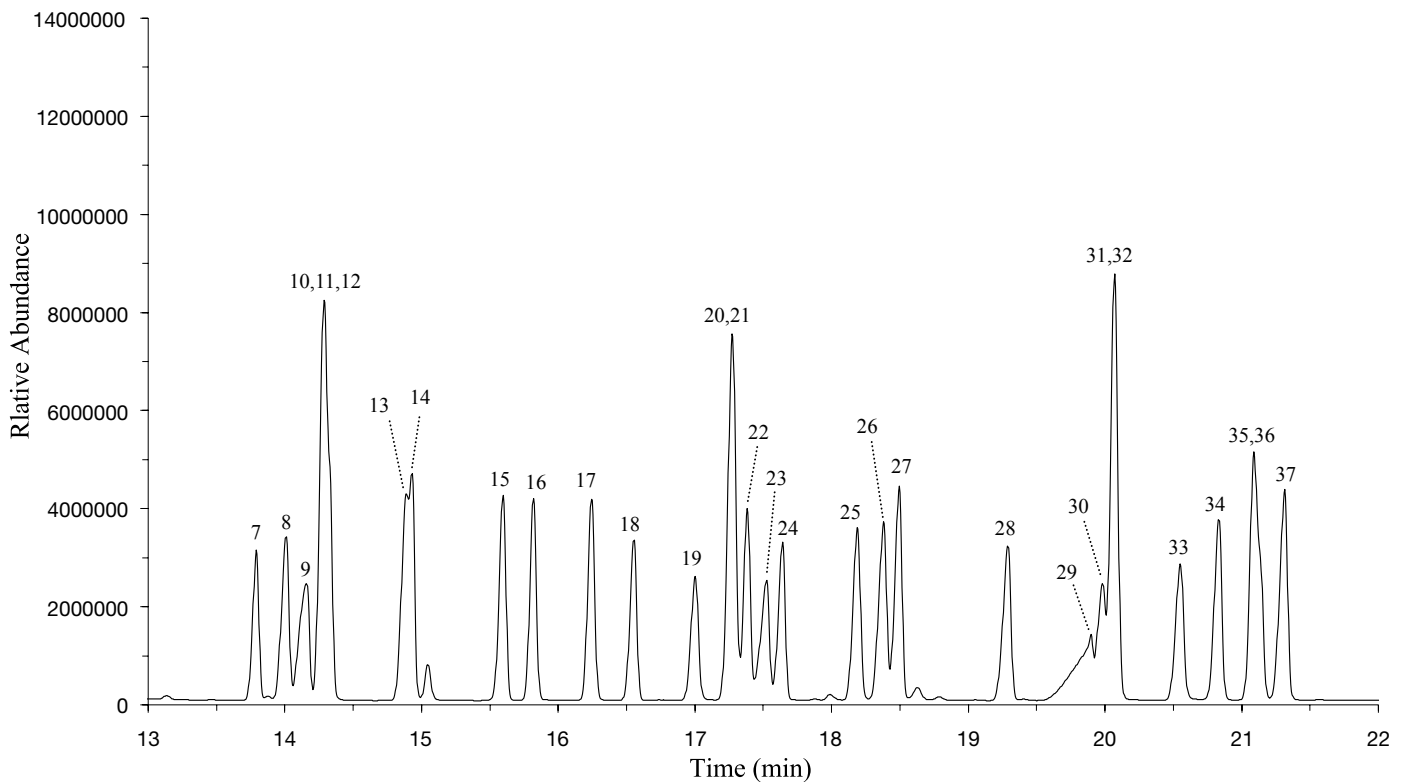
(50mg/L of acetamiprid and 10mg/L of each other chemicals contained in acetone solution, Freeze storage )

# Pesticides standard solution 70

## ▶ Example of analysis of Pesticides standard solution 70 (No.1~37)



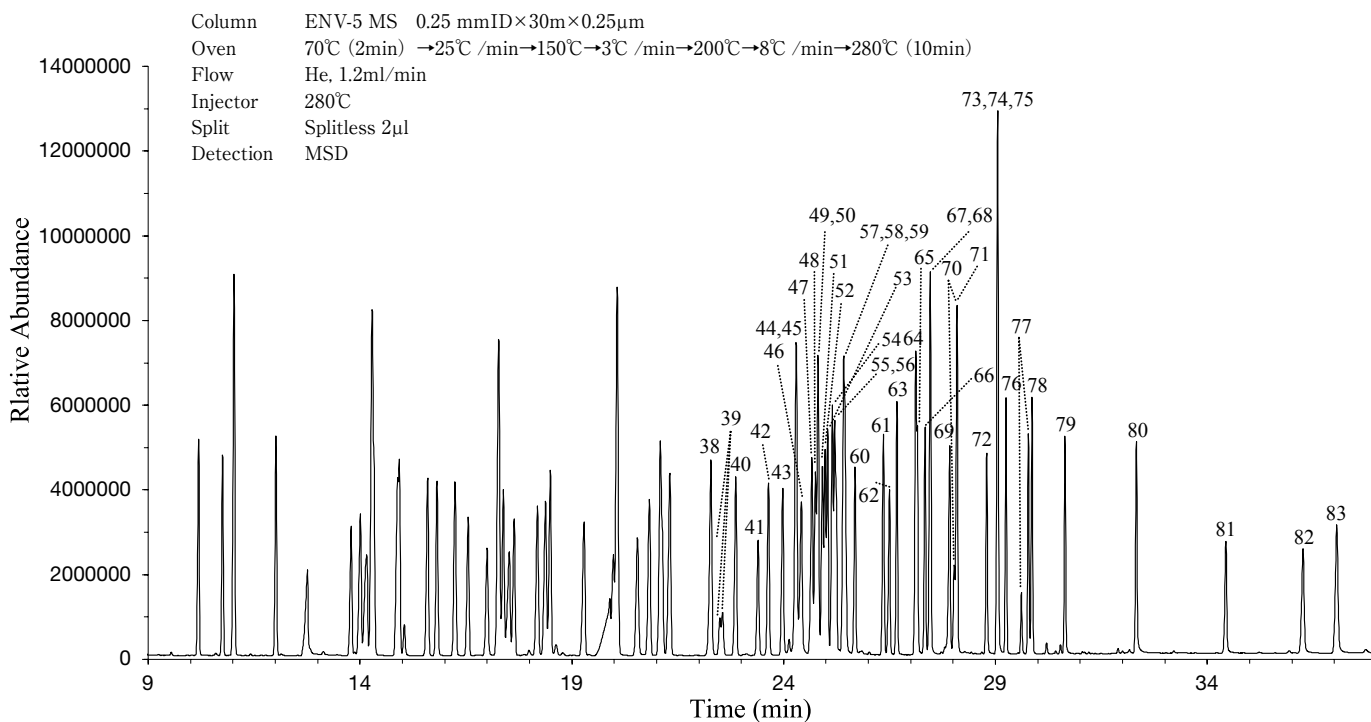
## ▶ ZOOM(No.7~37)



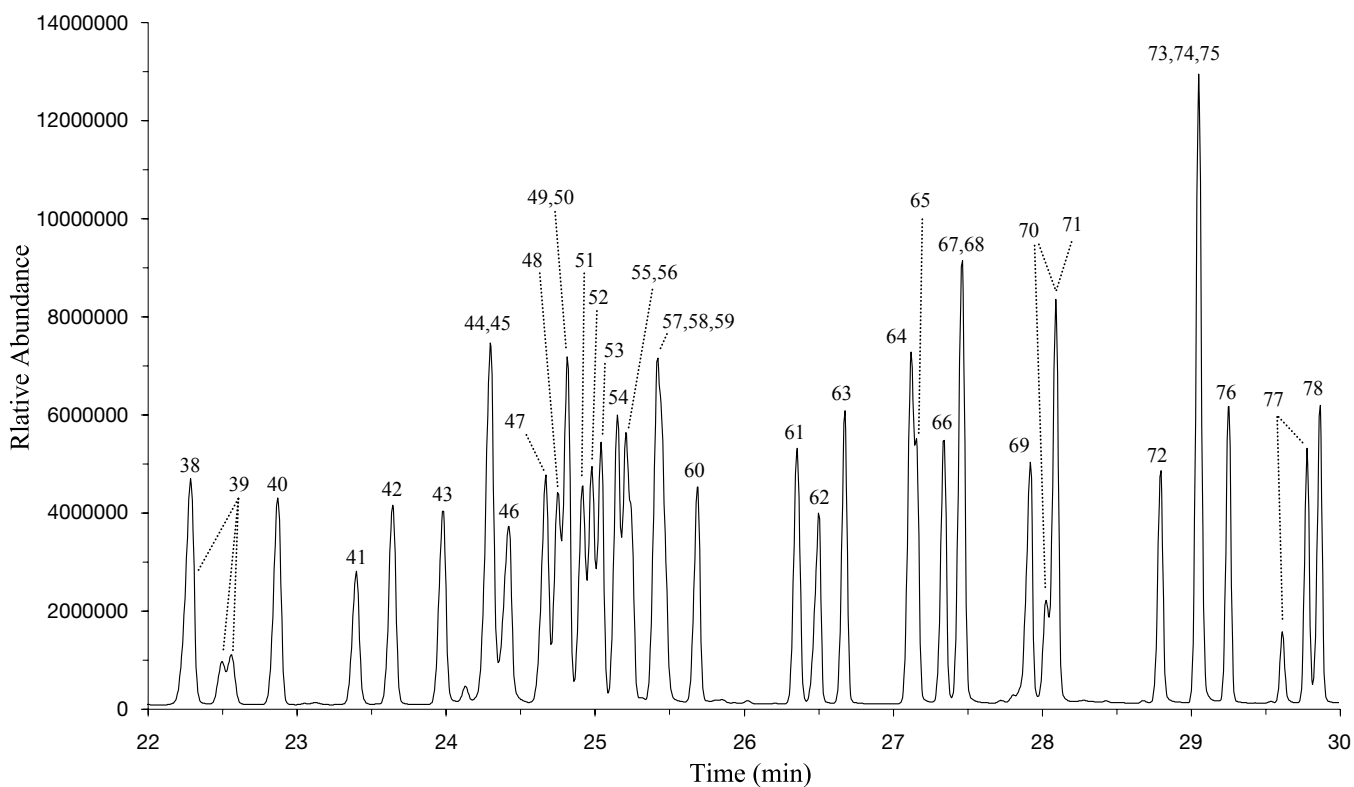


Peak No.	Product name	RT( min )	Monitor Ion( m/z )						Catalog No.	Packing
			1	2	3	4	5	6		
1	XMC	10.19	122	107					46001 -96	200 mg
2	Tecnazene	10.76	203	261	215				49829 -11	250 mg
3	Propachlor	11.03	120	176					49827 -71	250 mg
4	Propoxur	11.03	110	152					49801 -59	250 mg
5	Benfluralin	12.02	292	264					04073 -96	200 mg
6	Monocrotophos	12.76	127	192	164				49826 -91	100 mg
7	Dicloran	13.79	206	176					10786 -96	200 mg
8	Carbofuran	14.01	164	149					07741 -96	100 mg
9	Simazine	14.16	201	186					37087 -96	200 mg
10	Quintozene	14.29	237	295					35050 -96	200 mg
11	Clomazone	14.29	125	204					49829 -01	100 mg
12	Atrazine	14.29	215	200					01720 -96	200 mg
13	Cyanophos	14.89	243	109	125				07538 -96	200 mg
14	Propyzamide	14.89	173	175	145	255			49801 -60	250 mg
15	Isazofos	15.60	161	285	257	172	313		49803 -78	100 mg
16	Triallate	15.82	268	86					49803 -95	250 mg
17	Iprobenfos	16.24	91	204	246				20054 -96	200 mg
18	Benoxacor	16.56	120	259					49803 -57	250 mg
19	Phosphamidon	17.00	127	264					49826 -96	100 mg
20	Bromobutide	17.27	119	232					04275 -96	200 mg
21	Acetochlor	17.27	223	146	233	269			49803 -54	100 mg
22	Chlorpyrifos-methyl	17.38	286	125					49801 -15	250 mg
23	Propanil	17.53	161	217	163				32423 -96	200 mg
24	Vinclozolin	17.64	187	285	213				49803 -08	250 mg
25	Metalaxyl	18.19	206	220	249	234	279		25148 -96	200 mg
26	Ametryn	18.38	227	212					49803 -55	250 mg
27	Prometryn	18.50	241	226	184				49827 -01	250 mg
28	Ethofumesate	19.29	286	207	161				49827 -44	250 mg
29	Bromacil	19.90	231	205	207				49826 -08	250 mg
30	Quinoclamine	19.98	172	207	144				33038 -96	200 mg
31	Fenpropimorph	20.07	128	70	129	303			49829 -27	250 mg
32	Chlorthal-dimethyl	20.07	301	332					49802 -66	250 mg
33	Triadimefon	20.55	57	208					49801 -75	250 mg
34	Nitrothal-isopropyl	20.83	236	254	212				49829 -17	100 mg
35	Bromophos-methyl	21.09	331	125	329				49803 -58	100 mg
36	Fthalide	21.09	243	272					16070 -96	200 mg
37	Diphenamid	21.32	167	239					10787 -96	200 mg

▶ Example of analysis of Pesticides standard solution 70 (No.38~83)



▶ ZOOM(No.38~78)



Peak No.	Product name	RT( min )	Monitor Ion( m/z )						Catalog No.	Packing
			1	2	3	4	5	6		
38	Dimethametryn	22.29	212	255					49861 -34	250mg
39-1	Allethrin-1	22.29	123	136					49826 -69	100mg
39-2	Allethrin-2	22.29	123	136					49826 -69	100mg
39-3	Allethrin-3	22.49	123	136					49826 -69	100mg
39-4	Allethrin-4	22.55	123	136					49826 -69	100mg
40	Dimepiperate	22.87	119	145					49831 -46	100mg
41	Methidathion	23.40	145	302	85	125			49826 -04	100mg
42	Tetrachlorvinphos	23.64	329	331					40039 -96	200mg
43	Fenothiocarb	23.98	72	160					16204 -97	100mg
44	Flutriafol	24.30	219	164	201	123			49803 -76	100mg
45	Napropamide	24.30	128	271	72				49801 -50	100mg
46	Fenamiphos	24.42	303	217	154				49803 -73	250mg
47	E-Metominostrobin	24.67	191	238	196				49832 -91	10ppm/10mL AL*
48	Profenofos	24.75	339	337	139	97	374		49833 -35	250mg
49	Isoprothiolane	24.81	204	290	231	118	162		49828 -85	100mg
50	Isoxathion oxon	24.81	161	297					49835 -13	10mg
51	Oxadiazon	24.92	175	302	258	344			49826 -19	100mg
52	Tribufos(DEF)	24.98	169	314					49827 -33	100mg
53	Flamprop-methyl	25.04	276	105	77	335			49803 -32	100mg
54	Buprofezin	25.15	172	105	305	249			49801 -07	100mg
55	Bupirimate	25.20	273	208	316				49829 -28	250mg
56	Oxyfluorfen	25.20	331	300	302	252	361		49803 -86	100mg
57	Z -Metominostrobin	25.42	238	196	191	166			49832 -92	10ppm/1 mL AL*
58	Azaconazole	25.42	217	173					49828 -91	100mg
59	Imazamethabenz-methyl	25.42	256	214	187	245	288		49828 -95	100mg
60	Isoxathion	25.68	105	313	285	177			49861 -26	100mg
61	Ethion	26.37	231	153	384				49803 -72	250mg
62	Oxadixyl	26.50	163	132	278				49826 -94	100mg
63	Fluacrypyrim	26.68	204	190	189	145	320	426	49832 -34	50mg
64	Benalaxyl	27.12	148	206					49826 -72	250mg
65	Carfentrazone-ethyl	27.12	340	330	312	411			49830 -92	10mg
66	Trifloxystrobin	27.34	116	222					49829 -15	100mg
67	Quinoxifen	27.46	237	307					49829 -84	100mg
68	Norflurazon	27.46	303	145	173				49826 -93	100mg
69	Hexazinone	27.92	252	171	128				49826 -88	100mg
70-1	Propargite( BPPS )-1	28.03	135	107	173	350			32446 -96	200mg
70-2	Propargite( BPPS )-2	28.09	173	135	107	350			32446 -96	200mg
71	Diclofop methyl	28.09	340	253					49803 -68	250mg
72	Pyridaphenthion	28.80	340	199	97				32493 -96	200mg
73	Bromopropylate	29.05	341	183					49864 -16	250mg
74	Piperophos	29.05	320	140	84				49827 -70	250mg
75	Phosmet	29.05	160	161	133	317			32183 -96	200mg
76	Methoxychlor	29.25	227	228	274	212			49802 -50	100mg
77-1	Phenothrin-1	29.61	123	183					49803 -87	100mg
77-2	Phenothrin-2	29.78	123	183					49803 -87	100mg
78	Tetradifon	29.87	356	159	227				49826 -23	250mg
79	Pyrazophos	30.64	221	232	373				49827 -03	250mg
80	Fenbuconazole	32.33	129	198					49829 -26	100mg
81	Flumioxazin	34.44	354	287					16379 -96	100mg
82	Flumiclorac-pentyl	36.26	423	308					49829 -31	100mg
83	Tolfenpyrad	37.05	383	171	197				40070 -96	100mg

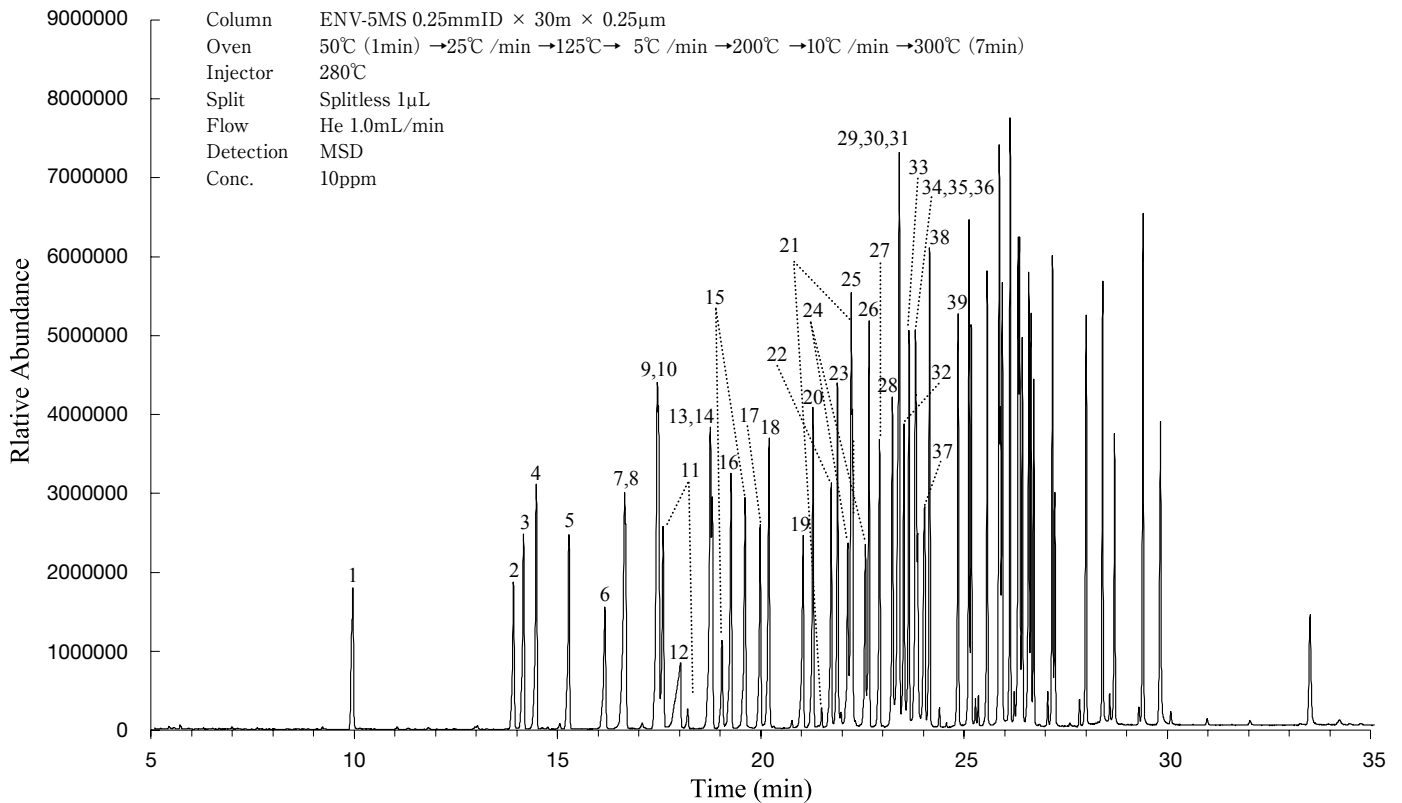
\*AL : Acetonitrile solution

Catalog No.	Product name	Number of ingredient	Grade	Packing
34283-96	<i>Pesticides standard solution 70</i>	83	For pesticide residue analysis	2 mL×5

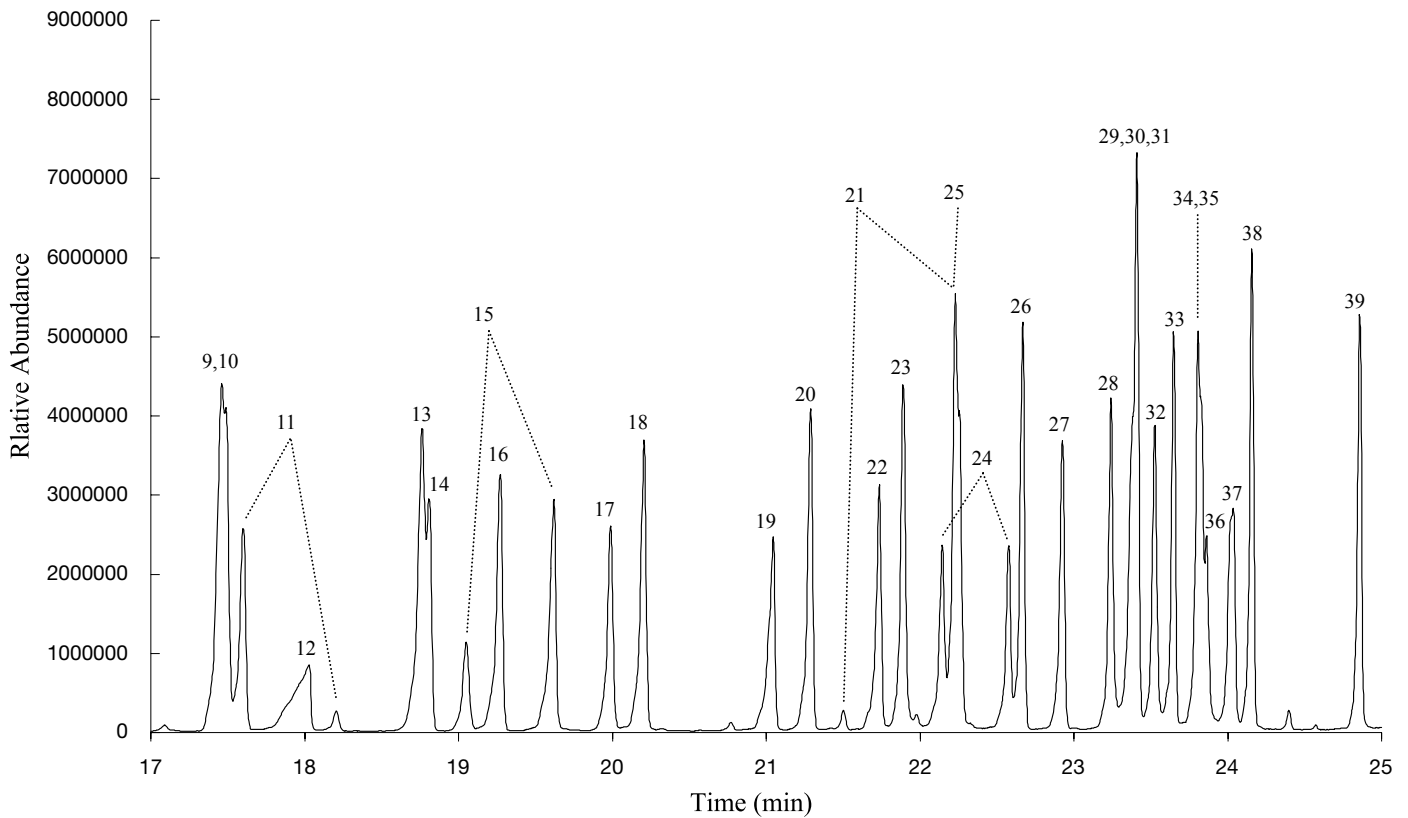
( 10 mg / L of each chemicals contained in acetone-hexane solution(1:1), Freeze storage )

# Pesticides standard solution 48

## ▶ Example of analysis of Pesticides standard solution 48 (No.1~39)



## ▶ ZOOM(No.9~39)

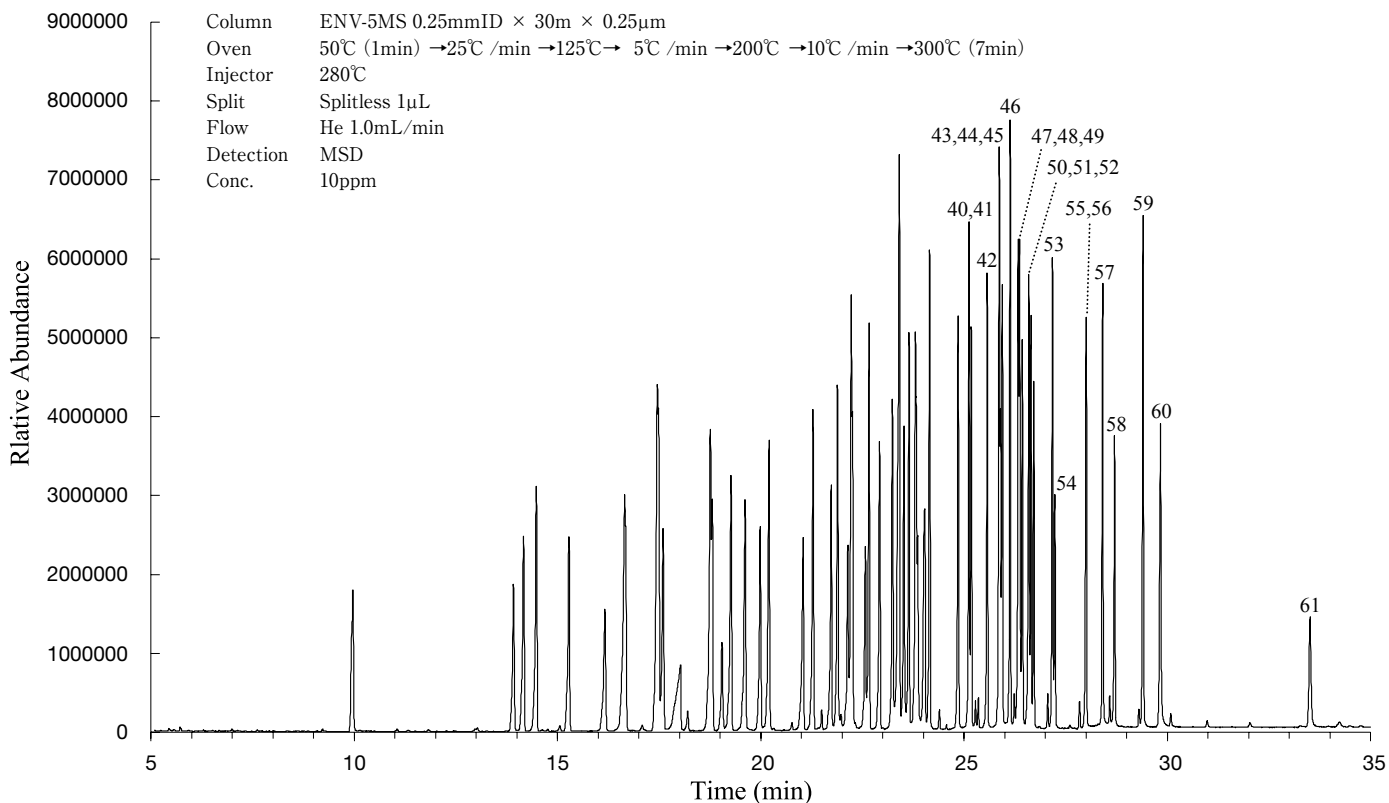


Peak No.	Product name	RT( min )	Monitor Ior( m/z )				Catalog No.	Packing
			1	2	3	4		
1	Mevinphos	9.97	192	164	127		49827 -62	100mg
2	Demeton-S-methyl	13.92	142	109			49826 -79	50mg
3	Ethalfuralin	14.17	316	276	333	292	49826 -83	250mg
4	Trifluralin	14.49	306	264	290	335	40852 -96	200mg
5	Phorate	15.28	260	231	121	75	49864 -17	100ppm/1 mL CY*
6	Dimethoate	16.17	125	87	229	143	49801 -84	100mg
7	Chlorbufam	16.66	223	164	127	153	49827 -19	250mg
8	Propazine	16.69	229	214	172		49803 -47	250mg
9	Pyroquilon	17.46	173	144	130		49826 -22	250mg
10	Pyrimethanil	17.49	199	198	183		49828 -04	100mg
11-1	Prohydrojasmon-1	17.61	184	153	254		49832 -11	100ppm/1.1 mL CY*
12	Terbacil	18.03	163	161	117	216	49803 -93	250mg
11-2	Prohydrojasmon-2	18.21	184	153	254		49832 -11	100ppm/1.1 mL CY*
13	Dichlofenthion	18.77	279	223	251		10110 -96	200mg
14	Dimethenamid	18.81	230	154	203		49828 -03	100mg
15-1	Spiroxamin-1	19.06	100				49829 -90	100mg
16	Alachlor	19.27	188	160	237	269	49802 -37	250mg
15-2	Spiroxamin-2	19.62	100				49829 -90	100mg
17	Simetryn	19.99	213	170	198		49801 -81	100mg
18	Terbutryn	20.21	226	241	185		49827 -77	250mg
19	Cyanazine	21.05	225	212	240	198	49860 -52	250mg
20	4,4'-Dichlorobenzophenone	21.29	250	139			49831 -57	250mg
21-1	Methoprene-1	21.51	175	153	111		49801 -47	100mg
22	Fipronil	21.74	369	367	351		16371 -63	100mg
23	Penconazole	21.89	248	159			49802 -93	100mg
24-1	Diclocymet-1	22.14	277	221	173		11442 -96	200mg
21-2	Methoprene-2	22.23	175	153	111		49801 -47	100mg
25	Procymidone	22.26	283	212	96		49802 -73	250mg
24-2	Diclocymet-2	22.58	277	221	173		11442 -96	200mg
26	Butachlor	22.67	176	160	311	237	04345 -96	200mg
27	Butamifos	22.93	286	200	232		49861 -31	100mg
28	Hexaconazole	23.24	214	175	231		49802 -69	100mg
29	TCMTB	23.39	180	238			49830 -79	10mg
30	Thifluzamide	23.41	449	194	166		40019 -96	100mg
31	Fludioxonil	23.43	248	154	127		16119 -96	200mg
32	Uniconazole-P	23.53	234	165	131		49803 -02	10ppm/10mL CY*
33	Kresoxim-methyl	23.65	206	116	131		49802 -91	100mg
34	Chlorfenapyr	23.81	408	247			08156 -96	200mg
35	Carboxin	23.83	235	225	143		49827 -18	250mg
36	Imibenconazole-desbenzyl	23.87	270	235			49831 -54	10mg
37	Fenoxanil	24.04	293	189	328		16380 -96	200mg
38	Z-Pyriminobac-methyl	24.15	302	256	330		49832 -10	10ppm/1 mL CY*
39	Triazophos	24.86	257	161	313	285	49803 -01	100mg

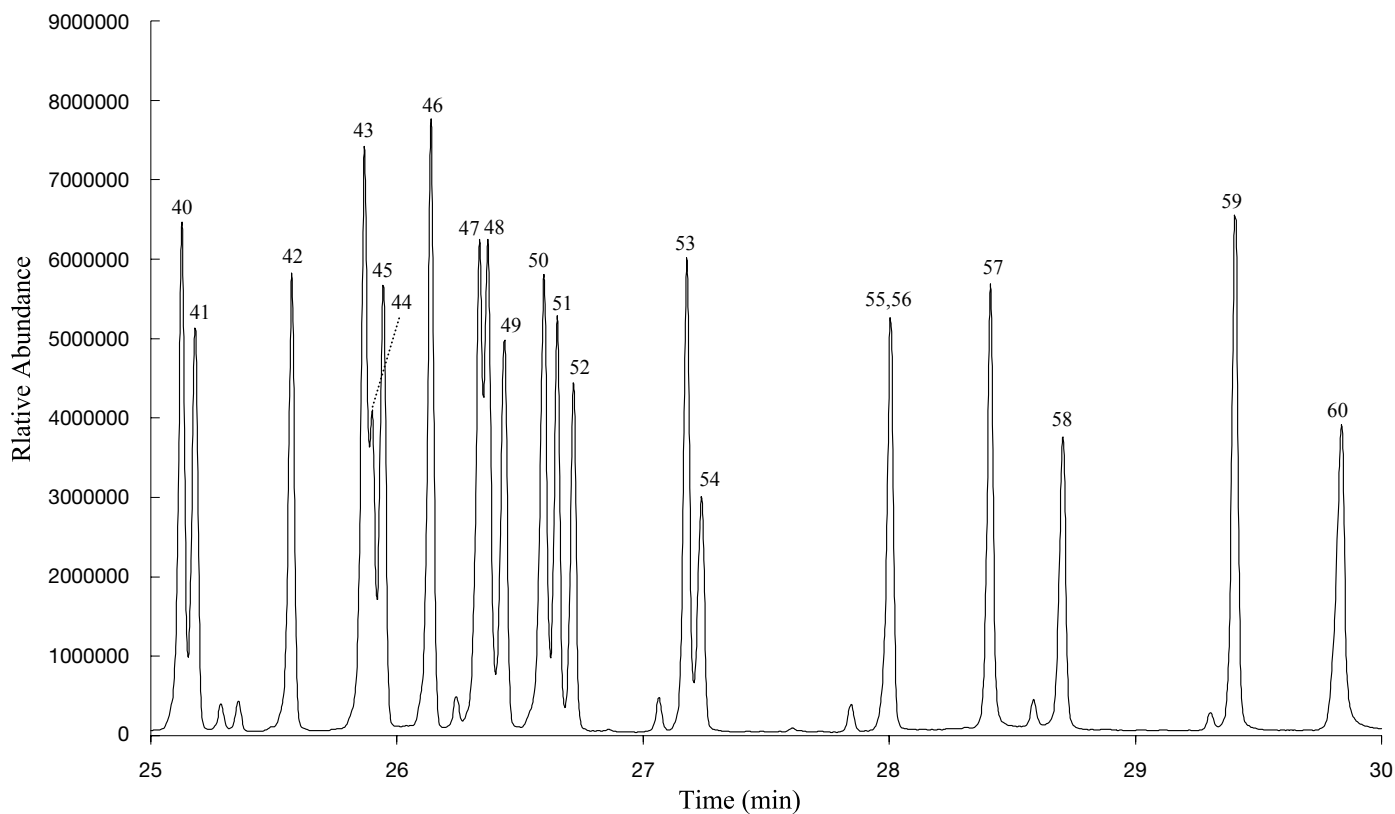
\* CY : cyclohexane solution



▶ Example of analysis of Pesticides standard solution 48 (No.40~61)



▶ ZOOM(No.40~60)



Peak No.	Product Name	RT( min )	Monitor Ion( m/z )				Catalog No.	Packing
			1	2	3	4		
40	E -Pyriminobac-methyl	25.13	302	256	173		49832 -09	10ppm/10mL CY*
41	Pyraflufen-ethyl	25.19	412	349			34073 -96	100 mg
42	Diflufenican	25.57	394	266			10610 -96	200 mg
43	Mefenpyr-diethyl	25.87	299	271	253	372	49830 -18	100 mg
44	Zoxamide	25.90	260	258	187		49830 -43	100 mg
45	Pyributycarb	25.95	181	165	108	330	32491 -96	200 mg
46	Bifenthrin	26.14	181	166			49802 -39	100 mg
47	Picolinafen	26.34	376	238			49830 -56	100 mg
48	Etoxazole	26.37	330	300	204	141	49831 -34	50 mg
49	Fenpropathrin	26.44	349	265	181		49803 -74	250 mg
50	Fenamidone	26.60	268	238	311		49830 -38	100 mg
51	Anilofos	26.65	226	125	184		49826 -71	100 mg
52	Bifenox	26.72	341	310			49802 -80	250 mg
53	Cyhalofop-butyl	27.18	357	256	229		08157 -96	200 mg
54	Azinphos-methyl	27.24	160	132			49803 -14	250 mg
55	Spirodiclofen	28.00	312	259			49831 -15	100 mg
56	Oryzalin	28.00	317	275			49802 -71	100 mg
57	Fluquinconazole	28.41	340	108			49830 -34	100 mg
58	Cafenstrole	28.71	188	119	100		08155 -96	200 mg
59	Etofenprox	29.41	376	183	163		49833 -27	100 mg
60	Fluridone	29.84	329	328	310		49829 -33	100 mg
61	Fluthiacet methyl	33.52	405	403			49831 -30	100 mg

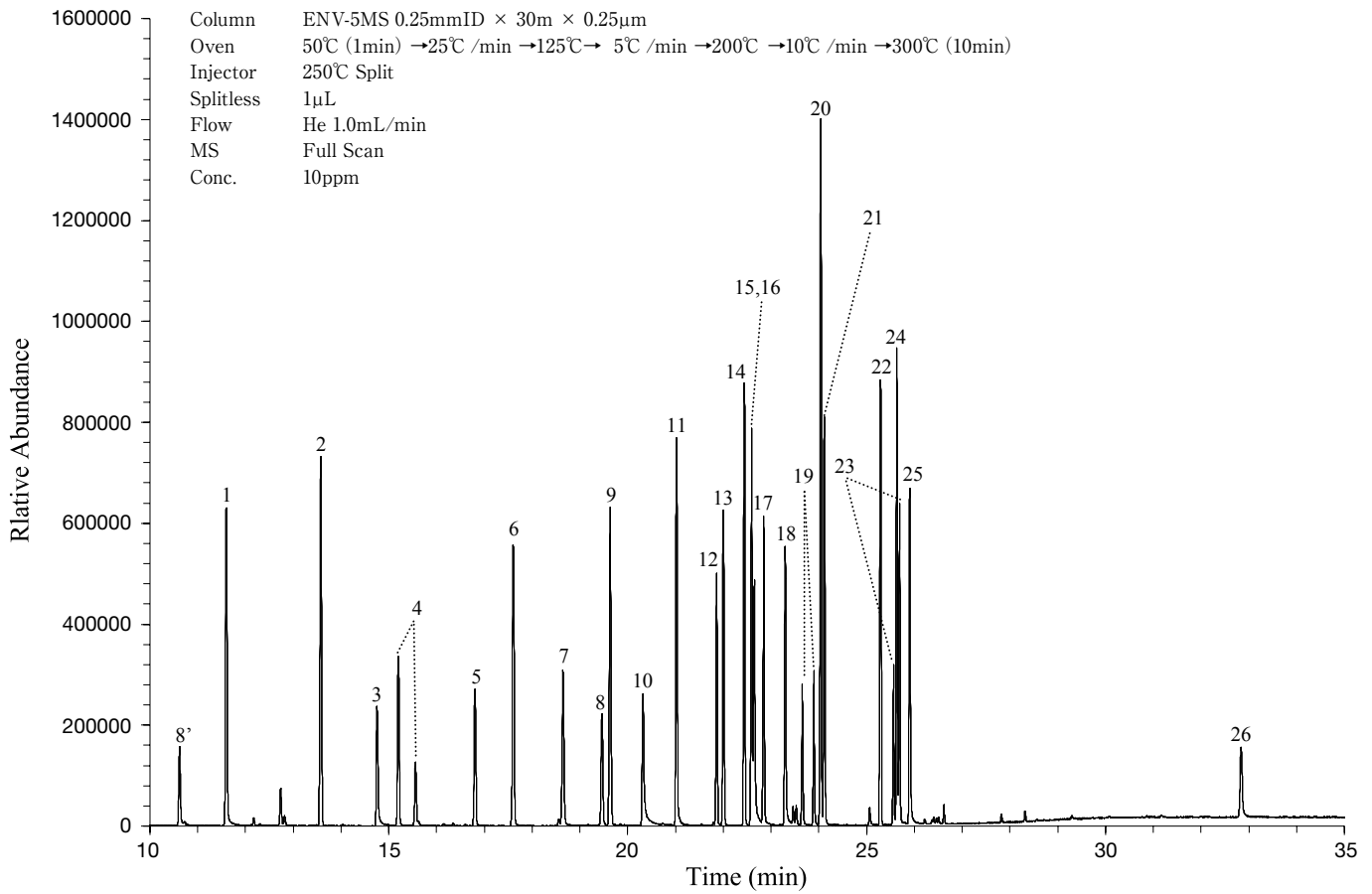
\* CY : Cyclohexane solution

Catalog No.	Product name	Number of ingredient	Grade	Packing
34049-96 34049-97	<i>Pesticides standard solution 48</i>	61	For pesticide residue analysis	2 mL×5 2 mL×1

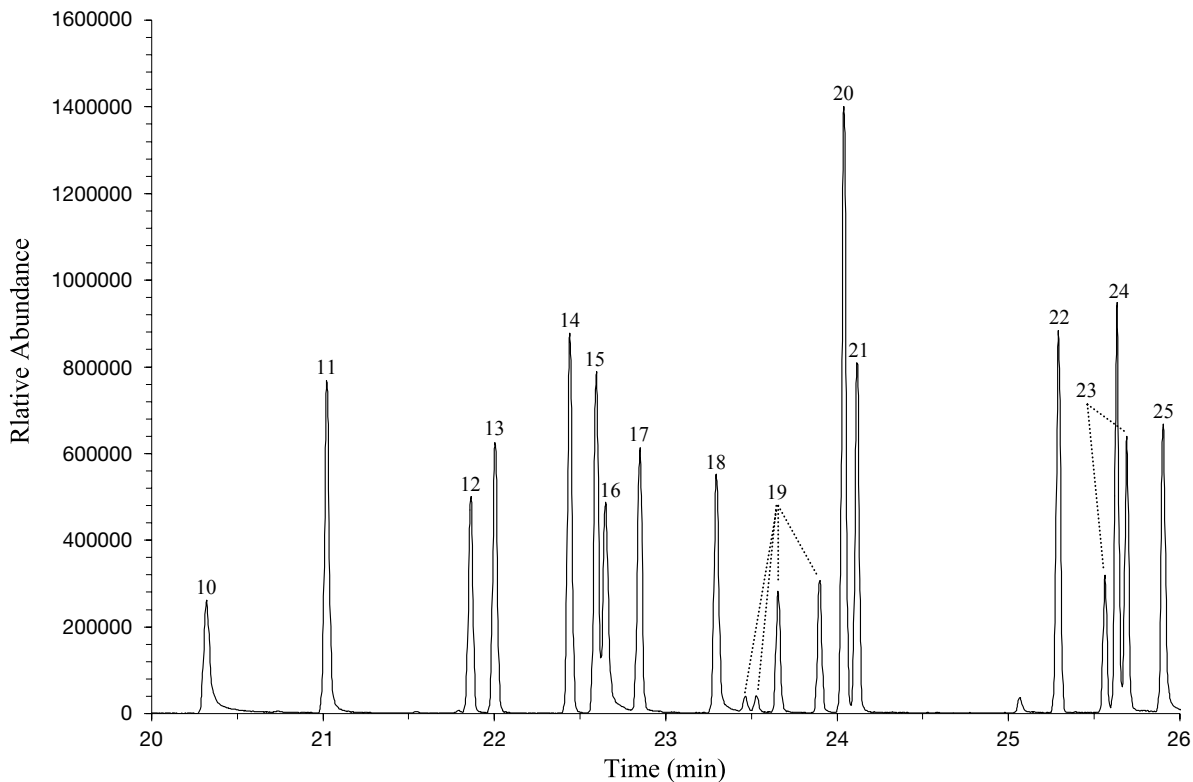
( 10 mg/L of each chemicals contained in acetone-hexane solution(1:1) Freeze storage )

# Pesticides standard solution 51

## ▶ Example of analysis of Pesticides standard solution 51



## ▶ ZOOM(No.10~25)



Peak No.	Product name	RT( min )	Monitor Ion			Catalog No.	Packing
			1	2	3		
8*	Carbofuran-3 -hydroxy	10.62	1	1		49827 -96	10mg
1	Chloroneb	11.60	2	2	1	49801 -14	100 mg
2	Chlorethoxyfos	13.58	2	1		49829 -88	50mg
3	Dicrotophos	14.75	2	1	127	49827 -37	100 mg
4-1	Diallate-1	15.20	2	2	86	49803 -24	100 mg
4-2	Diallate-2	15.56	2	2	86	49803 -24	100 mg
5	Dioxathion	16.80	2	1		49830 -65	100 mg
6	Disulfoton	17.61	2	88		49826 -12	250 mg
7	Formothion	18.65	1	1		49801 -92	100 mg
8	Carbofuran-3 -hydroxy	19.47	1	1		49827 -96	10mg
9	Fenchlorphos	19.63	2	2		49827 -46	100 mg
10	1-Naphthyl acetamide	20.32	1	1		49830 -57	500 mg
11	Tetraconazole	21.02	336	1		49827 -07	100 mg
12	Chlozolinate	21.86	3	2		49830 -63	10mg
13	Mecarbam	22.00	1	1		49830 -76	100 mg
14	Bromophos-ethyl	22.44	3	3		49803 -16	100 mg
15	Propaphos	22.60	3	2		49833 -87	100 mg
16	Chlorbenside	22.65	2	127	125	49803 -60	100 mg
17	Disulfoton sulfone	22.85	2	1		49832 -46	50mg
18	Chlorfenson	23.30	3	1	1	07214 -96	200 mg
19-1	Aramite-1	23.47	3	1		49830 -59	10mg
19-2	Aramite-2	23.54	3	1		49830 -59	10mg
19-3	Aramite-3	23.65	3	1		49830 -59	10mg
19-4	Aramite-4	23.90	3	1		49830 -59	10mg
20	Perthane	24.04	2	2	1	49827 -68	100 mg
21	Flufenpyr-ethyl	24.12	4	3		49832 -73	10mg
22	Endosulfan-sulphate	25.29	4	3	272	49803 -04	100 mg
23-1	Resmethrin-1	25.56	171	143	123	49803 -48	100 mg
24	Piperonyl butoxide	25.63	177	176	1	49803 -45	100 mg
23-2	Resmethrin-2	25.69	171	143	123	49803 -48	100 mg
25	Epoxiconazole	25.90	192	165		49830 -12	100 mg
26	Cinidon-ethyl	32.84	3	330		49830 -67	100 mg

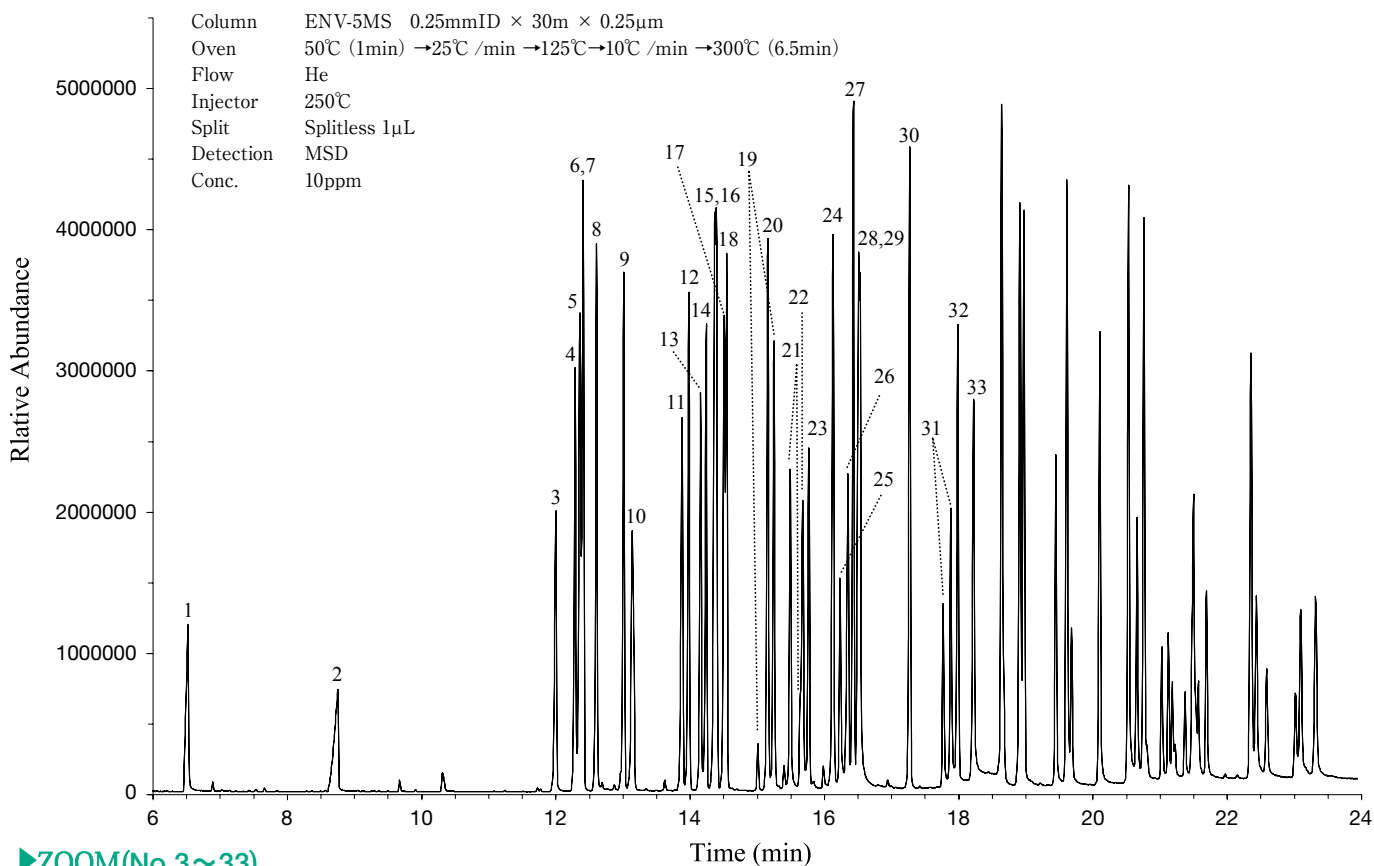
\* Carbofuran -3 - Degradation of Hydroxy

Catalog No.	Product name	Number of ingredient	Grade	Packing
34264-96 34264-97	<i>Pesticides standard solution 51</i>	26	For pesticide residue analysis	2 mL×5 2 mL×1

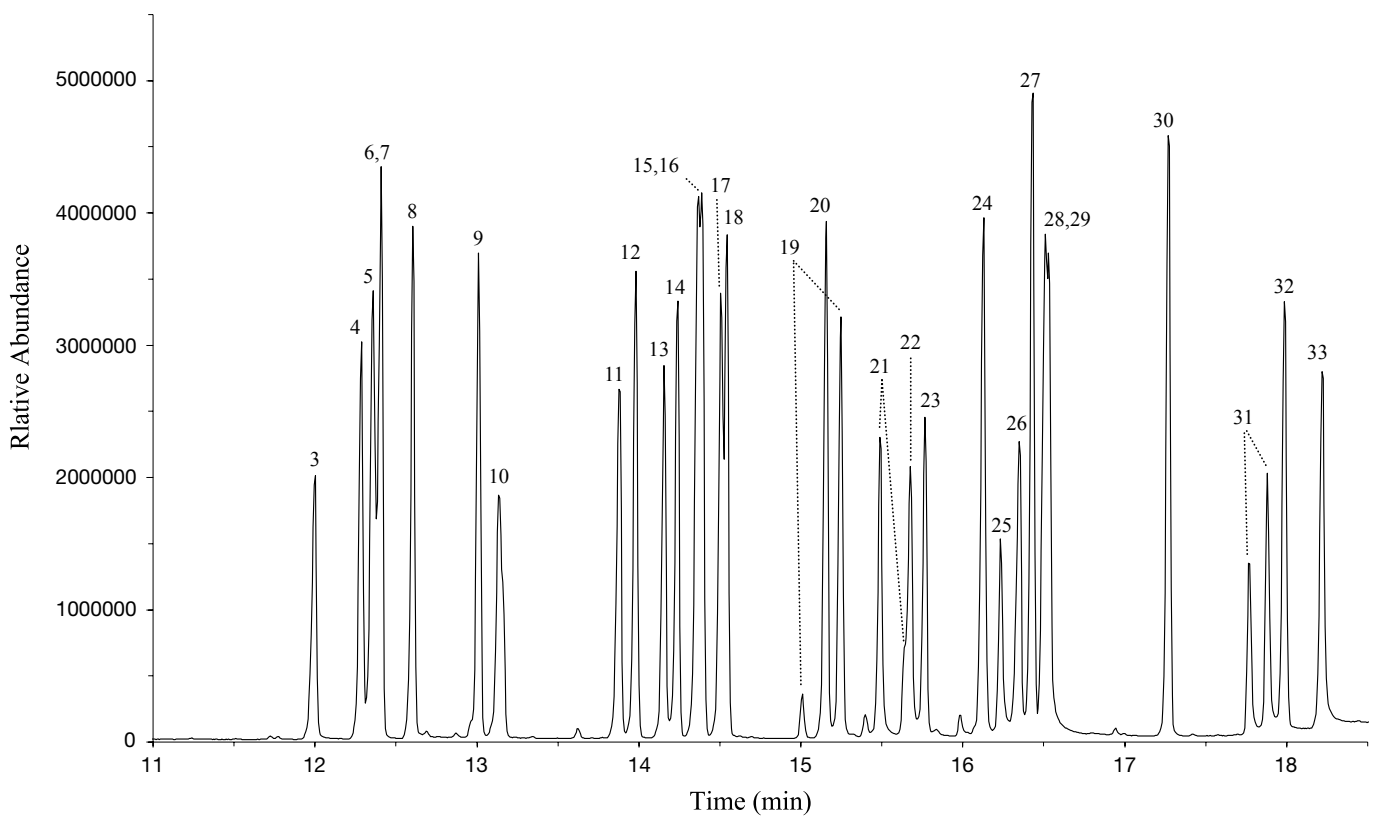
( 10 mg/L of each chemicals contained in acetone-hexane solution(1:1) 、 Freeze storage )

# Pesticides standard solution 71

## ▶ Example of analysis of Pesticides standard solution 71 (No.1~33)



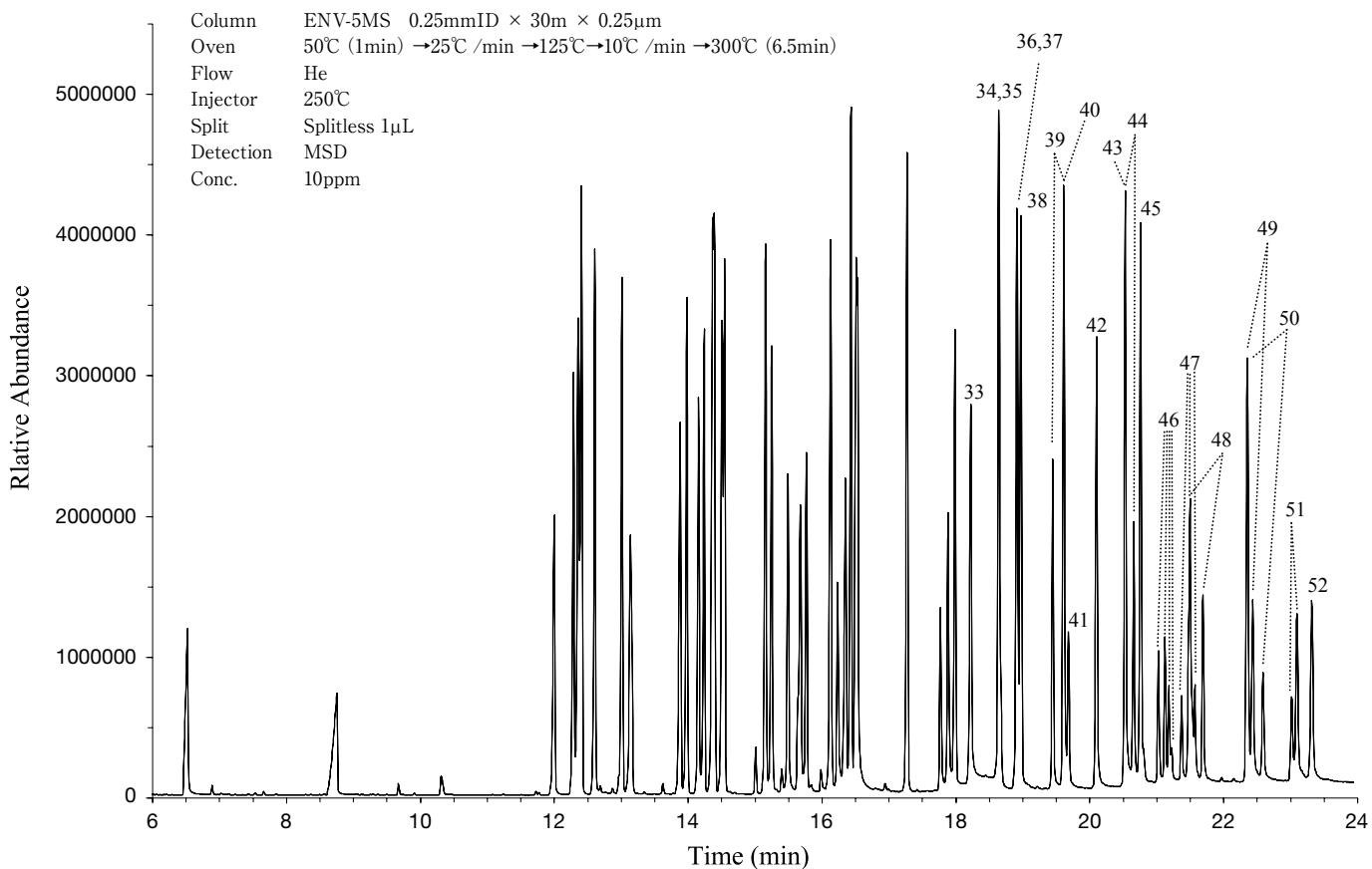
### ▶ ZOOM(No.3~33)



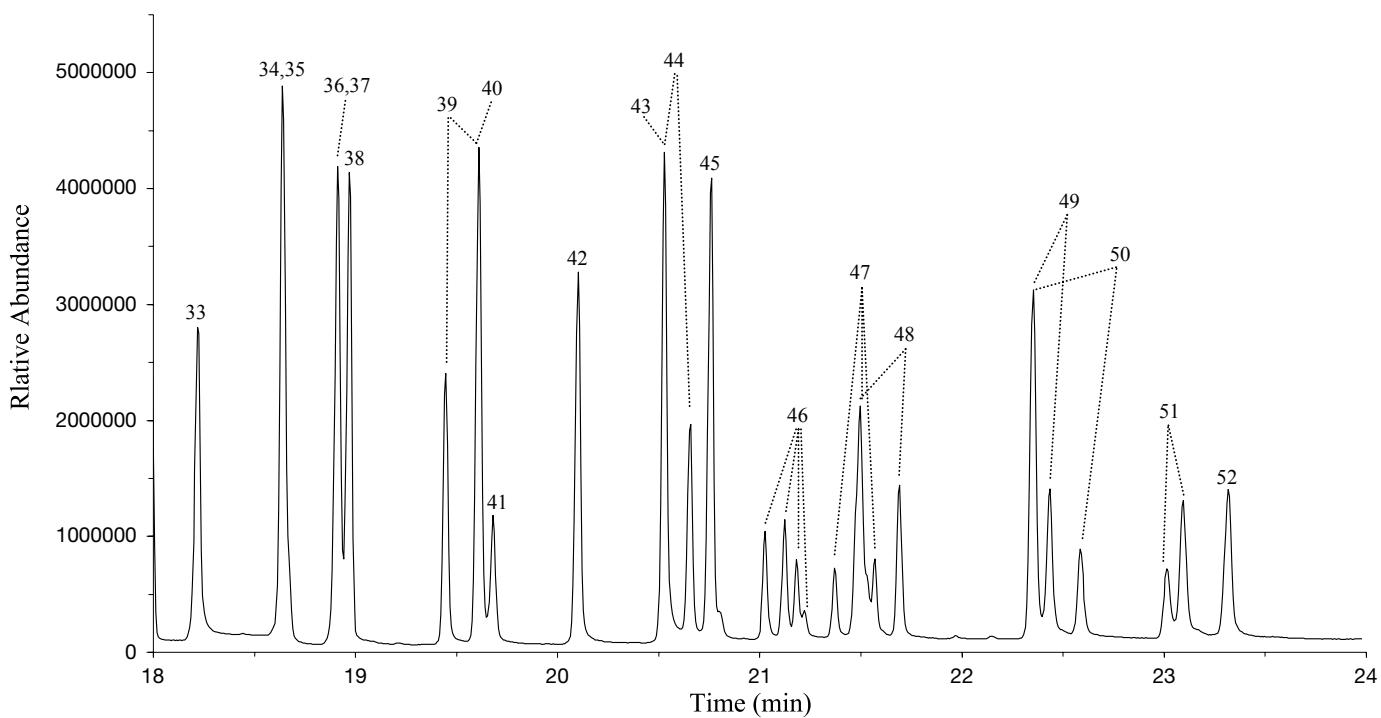


Peak No.	Product name	RT( min )	Monitor Ion( m/z )					Catalog No.	Packing
			1	2	3	4	5		
1	Methamidophos	6.52	94	141				49801 -46	100mg
2	Acephate	8.75	136	94				49801 -00	250mg
3	Dimethoate	12.00	87	125	93	229		49801 -84	100mg
4	Quintozene	12.29	249	237	295	265		35050 -96	200mg
5	Terbufos	12.36	231	153	57	288		49801 -72	100mg
6	Dimethipin	12.41	118	210				49801 -29	100mg
7	Diazinon	12.41	304	179	137			49801 -25	250mg
8	Tefluthrin	12.60	177	197				49801 -70	100mg
9	Pirimicarb	13.01	166	238	72			49801 -56	250mg
10	δ -HCH	13.14	219	181				49802 -36	50mg
11	Carbaryl(NAC )	13.88	144	115				07143 -96	200mg
12	Pirimiphos-methyl	13.98	290	305				49801 -57	250mg
13	Fenitrothion	14.16	277	260				49801 -35	250mg
14	Malathion	14.24	173	127	125	256		49801 -43	100mg
15	Metolachlor	14.37	238	162				25149 -96	200mg
16	Chlorpyrifos	14.39	314	316	197			49801 -16	250mg
17	Thiobencarb	14.51	100	257				40112 -96	200mg
18	Fenthion	14.55	278	169	279			49801 -79	250mg
19-1	Chlorfenvinphos-1	15.01	267	323				49833 -10	250mg
20	Isofenphos	15.16	255	213	121			49801 -40	100mg
19-2	Chlorfenvinphos-2	15.25	267	323				49833 -10	250mg
21-1	Triadimenol-1	15.49	112	168				49801 -76	250mg
21-2	Triadimenol-2	15.68	112	168				49801 -76	250mg
22	Thiabendazole	15.68	201	174				40650 -96	200mg
23	Methidathion	15.77	145	85				49826 -04	100mg
24	Flutolanil	16.13	281	323	173			49827 -92	100mg
25	Imazalil	16.24	215	173	217			49801 -39	100mg
26	Fludioxonil	16.35	248	154	182			16119 -96	200mg
27	p,p'-DDE	16.43	318	246				10038 -96	100mg
28	Flusilazole	16.51	233	234	206	315		49802 -07	100mg
29	Myclobutanil	16.51	179	150	288			49801 -49	100mg
30	p,p'-DDD	17.27	235	237				10039 -96	100mg
31-1	Propiconazole-1	17.77	259	261	173			32588 -96	200mg
31-2	Propiconazole-2	17.88						32588 -96	200mg
32	Endosulfan-sulphate	17.99	274	272	387	422		49803 -04	100mg
33	Tebuconazole	18.22	250	125				40511 -96	100mg

► Example of analysis of Pesticides standard solution 71 (No.33~52)



► ZOOM(No.33~52)



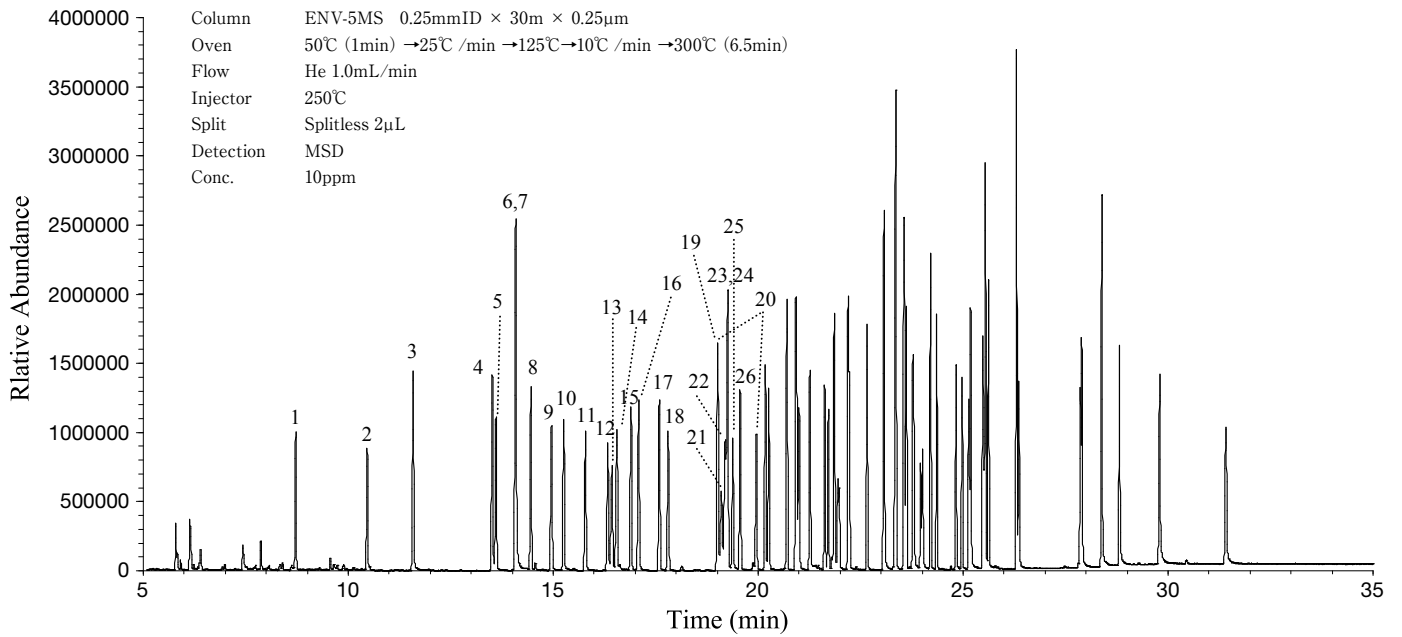
Peak No.	Product name	RT( min )	Monitor Ior( m/z )					Catalog No.	Packing
			1	2	3	4	5		
34	Bifenthrin	18.64	181	166	165			49802 -39	100 mg
35	Iprodione	18.64	314	316	245			20301 -96	200 mg
36	Acetamiprid	18.91	126	152	90	221		01695 -96	200 mg
37	Fenpropathrin	18.91	181	125	349			49803 -74	250 mg
38	Methoxychlor	18.97	227	228	346			49802 -50	100 mg
39-1	Cyhalothrin-1	19.45	181	197	449			49801 -19	100 mg
39-2	Cyhalothrin-2	19.61	181	197	449			49801 -19	100 mg
40	Pyriproxyfen	19.61	136	226	78			49827 -95	100 mg
41	Azinphos-methyl	19.68	160	132				49803 -14	250 mg
42	Fenarimol	20.10	251	219	139	330		16010 -96	200 mg
43	Bitertanol	20.53	170	171	168	112		49801 -06	250 mg
44-1	Permethrin-1	20.53	183	184	163			49801 -54	250 mg
44-2	Permethrin-2	20.66	183	184	163			49801 -54	250 mg
45	Pyridaben	20.76	147	309	364			49801 -63	25 mg
46-1	Cyfluthrin-1	21.03	206	226	163			49801 -18	250 mg
46-2	Cyfluthrin-2	21.13	206	226	163			49801 -18	250 mg
46-3	Cyfluthrin-3	21.19	206	226	163			49801 -18	250 mg
46-4	Cyfluthrin-4	21.22	206	226	163			49801 -18	250 mg
47-1	Cypermethrin-1	21.37	163	165	127			49801 -21	100 mg
47-2	Cypermethrin-2	21.50	163	165	127			49801 -21	100 mg
48-1	Flucythrinate-1	21.50	199	157	451			49833 -92	100 mg
47-3	Cypermethrin-3	21.57	163	165	127			49801 -21	100 mg
47-4	Cypermethrin-4	21.57	163	165	127			49801 -21	100 mg
48-2	Flucythrinate-2	21.69	199	157	451			49833 -92	100 mg
49-1	Fluvalinate-1	22.35	250	252	502			16057 -96	200 mg
50-1	Fenvalerate-1	22.35	225	167	125			49801 -37	250 mg
49-2	Fluvalinate-2	22.59	250	252	502			16057 -96	200 mg
50-2	Fenvalerate-2	22.59	225	167	125			49801 -37	250 mg
51-1	Difenoconazole-1	23.02	323	265				49834 -09	250 mg
51-2	Difenoconazole-2	23.10	323	265				49834 -09	250 mg
52	Deltamethrin	23.32	253	181				49801 -24	250 mg

Catalog No.	Product name	Number of ingredient	Grade	Packing
34284-96	<i>Pesticides standard solution 71</i>	52	For pesticide residue analysis	2 mL×5

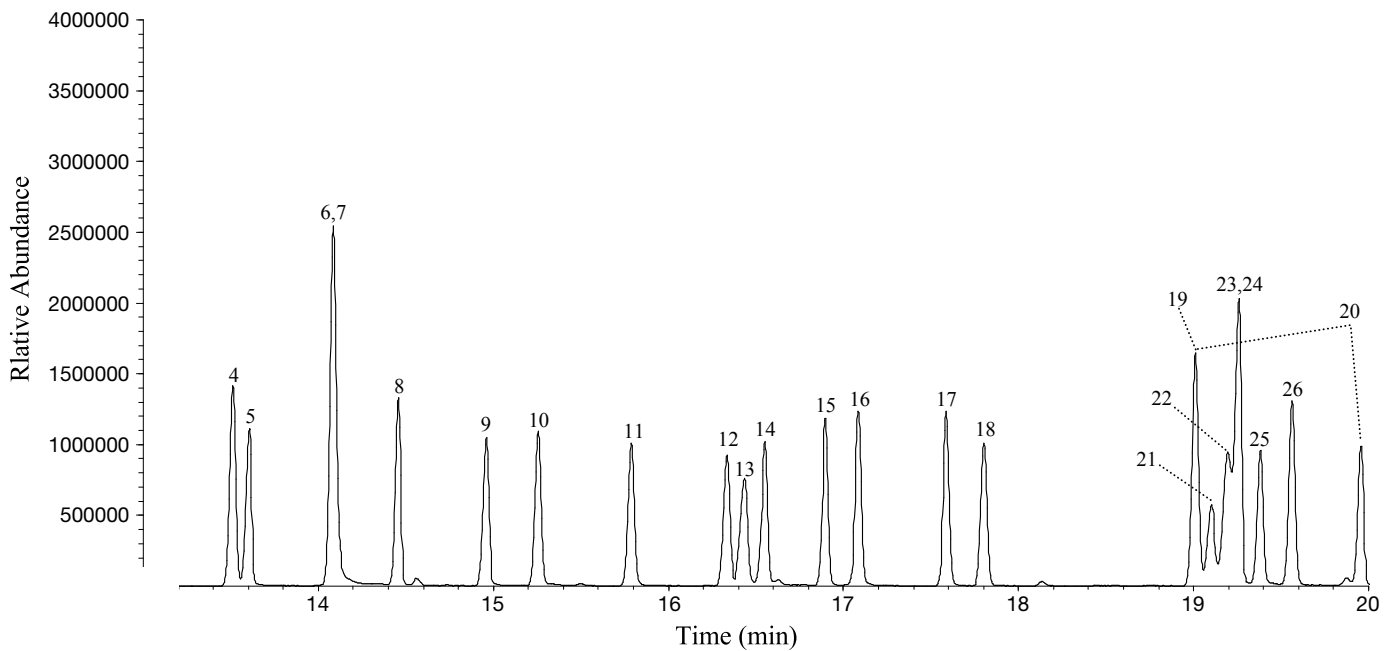
( 10 mg/L of each chemicals contained in acetone-hexane solution(1:1) 、 Freeze storage )

# Pesticides standard solution 49

## ▶ Example of analysis of Pesticides standard solution 49 (No.1~26)



## ▶ ZOOM(No.4~26)



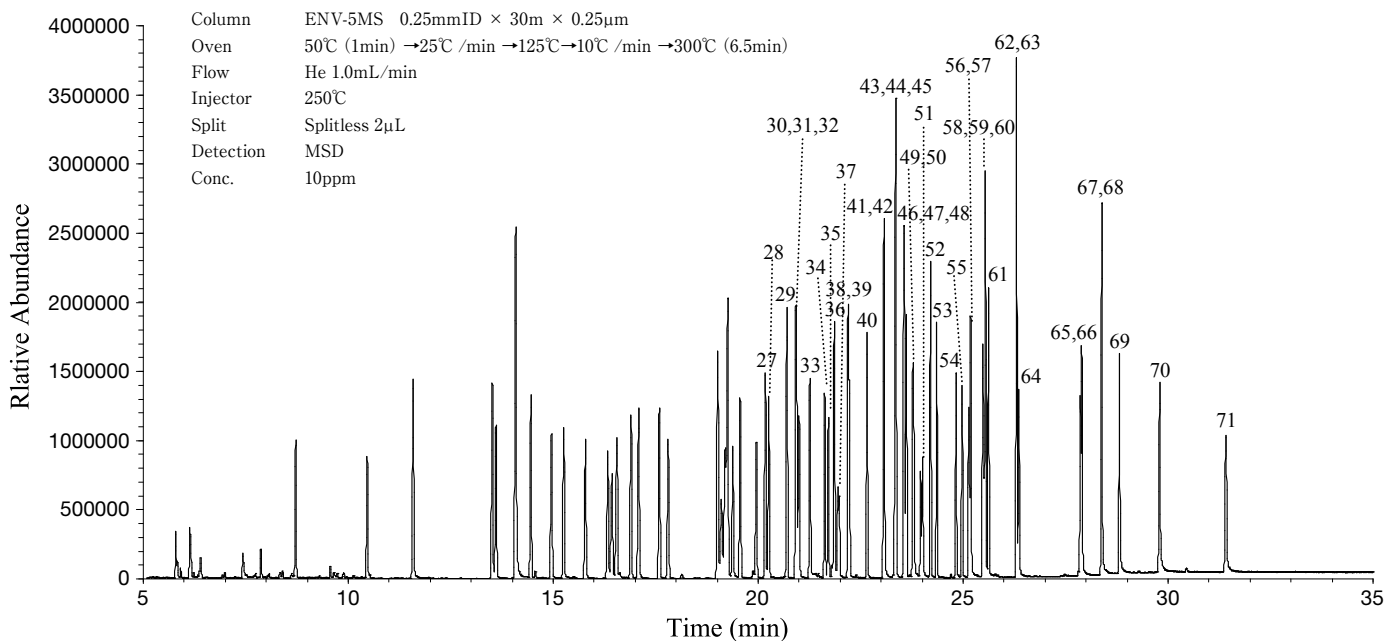
Peak No.	Product name	RT( min )	Monitor Ior( m/z )					Catalog No.	Packing
			1st	2nd	3nd	4th	5th		
1	EPTC	8.73	132	128	86			49802 -30	250 mg
2	Etridiazole	10.47	213	211	183			49861 -27	100 mg
3	Chloroneb	11.60	208	206	193	191		49801 -14	100 mg
4	Fenobucarb( BPMC )	13.53	150	121				16006 -96	50mg
5	Propoxur	13.62	152	110				49801 -59	250 mg
6	Ethoprophos	14.10	200	158				49801 -32	100 mg
7	Diphenylamine	14.10	169	168	167			10441 -96	100ppm/ 5×2 mL EA*
8	Trifluralin	14.47	306	264				40852 -96	200 mg
9	Bendiocarb	14.98	166	151				49801 -04	250 mg
10	Phorate	15.27	260	231	75			49864 -17	100ppm/1 mL CY* <sup>2</sup>
11	Thiometon	15.80	125	88				49801 -73	100 mg
12	Carbofuran	16.35	221	164	149			07741 -96	100 mg
13	Simazine	16.46	201	186				37087 -96	200 mg
14	Atrazine	16.57	215	200				01720 -96	200 mg
15	Propetamphos	16.92	194	138				49803 -90	100 mg
16	Propyzamide	17.11	175	173				49801 -60	250 mg
17	Disulfoton	17.61	274	186	89	88		49826 -12	250 mg
18	Triallate	17.82	270	268	143			49803 -95	250 mg
19	Chlorpyrifos-methyl	19.03	288	286				49801 -15	250 mg
20-1	Spiroxamin-1	19.03	198	101	100			49829 -90	100 mg
21	Propanil(DCPA )	19.12	217	163	161			32423 -96	200 mg
22	Vinclozolin	19.22	287	285	212			49803 -08	250 mg
23	Metribuzin	19.28	199	198	144			25365 -96	200 mg
24	Alachlor	19.28	237	188	160			49802 -37	250 mg
25	Parathion-methyl	19.40	263	109				49801 -53	100 mg
26	Metalaxyl	19.58	249	234	206	132		25148 -96	200 mg
20-2	Spiroxamin-2	19.97	198	101	100			49829 -90	100 mg

\* EA : Ethyl acetate solution

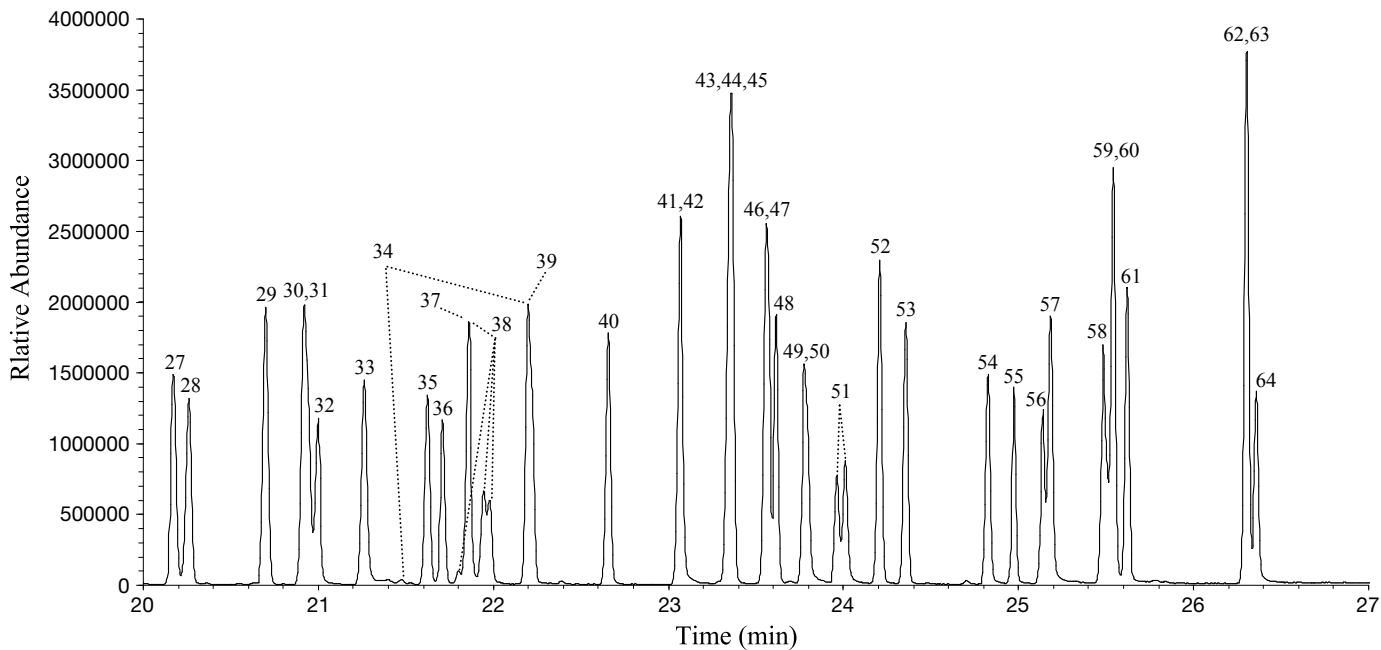
\*2 CY : Cyclohexane solution



▶ Example of analysis of Pesticides standard solution 49 (No.27~71)



▶ ZOOM(No.27~64)



Peak No.	Product name	RT(min )	Monitor Ion( m/z )					Catalog No.	Packing
			1st	2nd	3rd	4th	5th		
27	Terbutryn	20.19	241	226				49827 -77	250 mg
28	Ethofumesate	20.28	286	207				49827 -44	250 mg
29	Fenpropimorph	20.72	303	129	128			49829 -27	250 mg
30	Isofenphos-oxon	20.94	229	201				49833 -17	10mg
31	Parathion( -ethyl )	20.94	291	139	87			49802 -59	100 mg
32	Triadimefon	21.02	210	208	181			49801 -75	250 mg
33	4,4'-Dichlorobenzophenone	21.28	250	139				49831 -57	250 mg
34-1	Methoprene-1	21.48	191	153	111	73		49801 -47	100 mg
35	Pendimethalin	21.64	253	252				32042 -96	200 mg
36	Fipronil	21.72	369	367	351	213		16371 -63	100 mg
38-1	Allethrin-1	21.82	136	123				49826 -69	100 mg
37	Penconazole	21.88	248	159				49802 -93	100 mg
38-2	Allethrin-2	21.88	136	123				49826 -69	100 mg
38-3	Allethrin-3	21.96	136	123				49826 -69	100 mg
38-4	Allethrin-4	22.00	136	123				49826 -69	100 mg
34-2	Methoprene-2	22.22	191	153	111	73		49801 -47	100 mg
39	Procymidone	22.22	285	283				49802 -73	250 mg
40	Tetrachlorvinphos	22.67	331	329	109			40039 -96	200 mg
41	Fenamiphos	23.09	303	288	154			49803 -73	250 mg
42	Flutriafol	23.09	219	164				49803 -76	100 mg
43	Profenofos	23.38	339	337				49833 -35	250 mg
44	Isoprothiolane	23.38	290	231	189	162	118	49828 -85	100 mg
45	Oxadiazon	23.38	344	258	175			49826 -19	100 mg
46	Oxyfluorfen	23.58	361	252				49803 -86	100 mg
47	Buprofezin	23.58	305	175	172	106		49801 -07	100 mg
48	Kresoxim-methyl	23.64	206	132	116			49802 -91	100 mg
49	Chlorfenapyr	23.80	406	247	59			08156 -96	200 mg
50	Carboxin	23.80	235	143	87			49827 -18	250 mg
51-1	Cyproconazole-1	23.98	224	222				49802 -28	100 mg
51-2	Cyproconazole-2	24.03	224	222				49802 -28	100 mg
52	Chlorobenzilate	24.22	253	251	139			49801 -13	100 mg
53	Ethion	24.37	384	231	153			49803 -72	250 mg
54	Triazophos	24.85	177	172	161			49803 -01	100 mg
55	Famphur	24.99	218	217				49827 -45	100 mg
56	Norflurazon	25.16	305	303	145			49826 -93	100 mg
57	Quinoxifen	25.20	307	237				49829 -84	100 mg
58	Hexazinone	25.51	172	171				49826 -88	100 mg
59	Propargite( BPPS )	25.56	350	173	135			32446 -96	200 mg
60	Diflufenican	25.56	394	266				10610 -96	200 mg
61	Piperonyl butoxide	25.64	177	176	149			49803 -45	100 mg
62	Picolinafen	26.32	376	238				49830 -56	100 mg
63	Bromopropylate	26.32	343	341	339			49864 -16	10ppm/10mL AL*
64	Phosmet	26.38	161	160				32183 -96	200 mg
65	Pyraclufos	27.87	362	360				34070 -96	100 mg
66	Fenoxaprop-ethyl	27.91	361	288				49826 -85	100 mg
67	Prochloraz	28.40	310	180				49826 -97	250 mg
68	Fluquinconazole	28.40	375	342	340			49830 -34	100 mg
69	Fenbuconazole	28.83	198	129				49829 -26	100 mg
70	Fluridone	29.81	329	328				49829 -33	100 mg
71	Azoxystrobin	31.43	388	345	344			49826 -37	100 mg

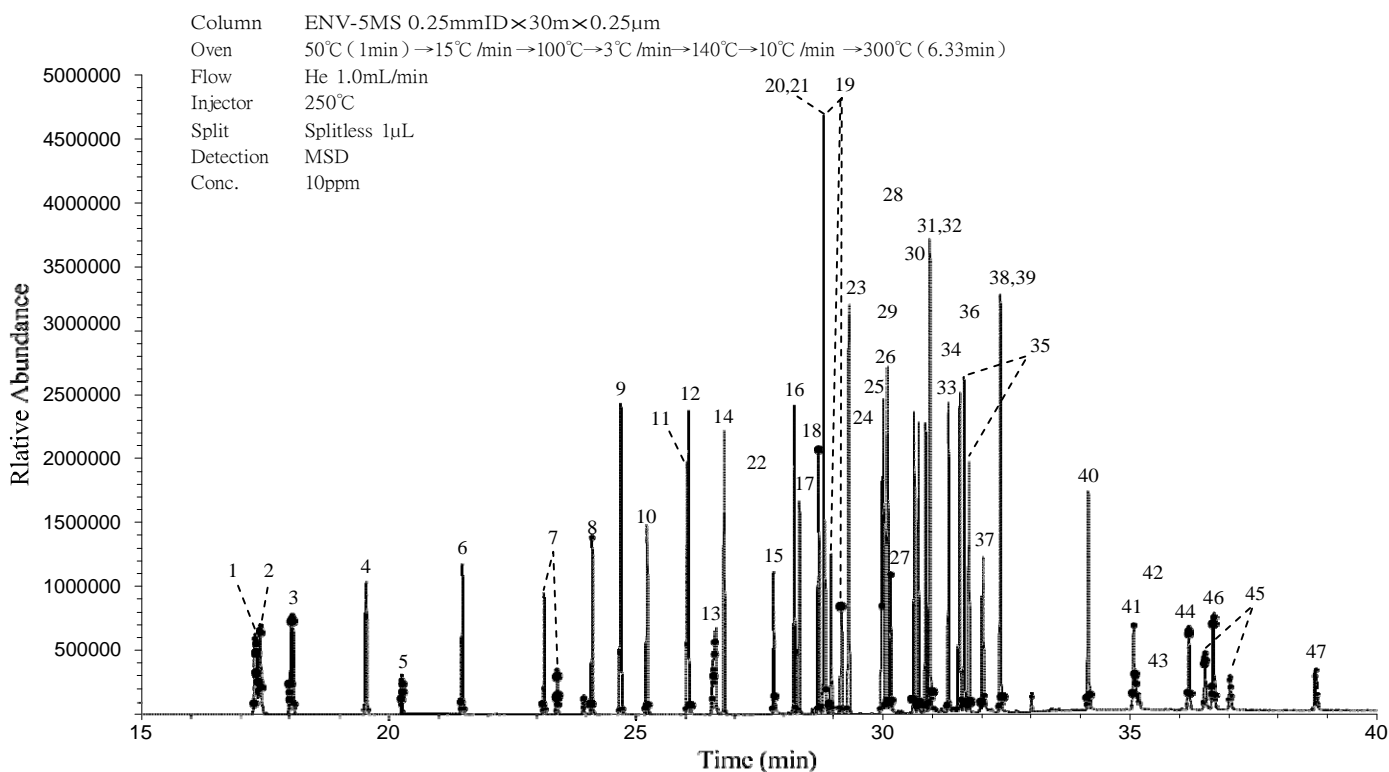
\* AL : Acetonitrile solution

Catalog No.	Product name	Number of ingredient	Grade	Packing
34250-96	<i>Pesticides standard solution 49</i>	71	For pesticide residue analysis	2 mL×5

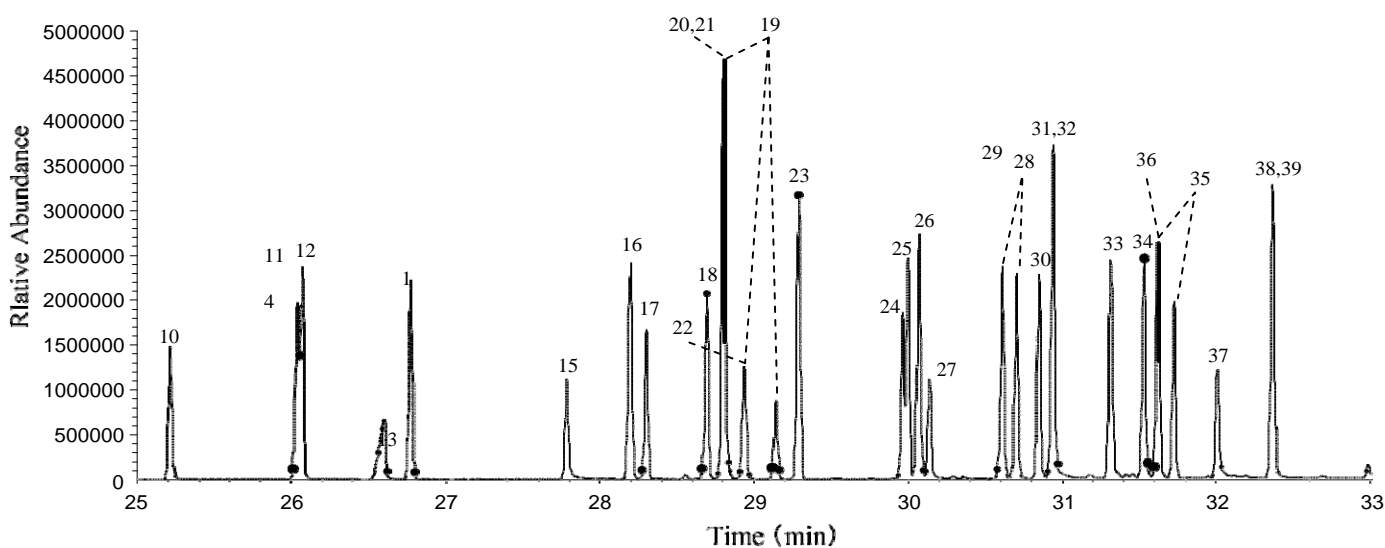
( 10 mg / L of each chemicals contained in acetone-hexane solution(1:1) · Freeze storage )

# Pesticides standard solution 52

## ▶ Example of analysis of Pesticides standard solution 52



## ▶ ZOOM ( No.10 ~ 39 )



Peak No.	Product name	RT( min )	Monitor Ion( m/z )					Catalog No.	Packing
			1st	2nd	3rd	4th	5th		
1	Z -Mevinphos	17.30	192	127				49832 -80	50mg
2	E -Mevinphos	17.40	192	127				49832 -79	50mg
3	Nitrapyrin	18.04	196	194				49830 -02	100 mg
4	Methacrifos	19.54	240	208	180	125		49826 -89	100 mg
5	Tebuthiuron	20.26	171	156				49827 -06	250 mg
6	Tecnazene	21.48	261	259	203	215		49829 -11	250 mg
7-1	Diallate-1	23.14	236	234	128			49803 -24	100 mg
7-2	Diallate-2	23.40	236	234	128			49803 -24	100 mg
8	Chlorbufam( BIPC )	24.12	225	223	164	153		49827 -19	250 mg
9	Pyrimethanil	24.68	199	198				49828 -04	100 mg
10	Oxabetrinil	25.22	103	77	73			49830 -60	100 mg
11	Ametryn	26.04	227	212	185			49803 -55	250 mg

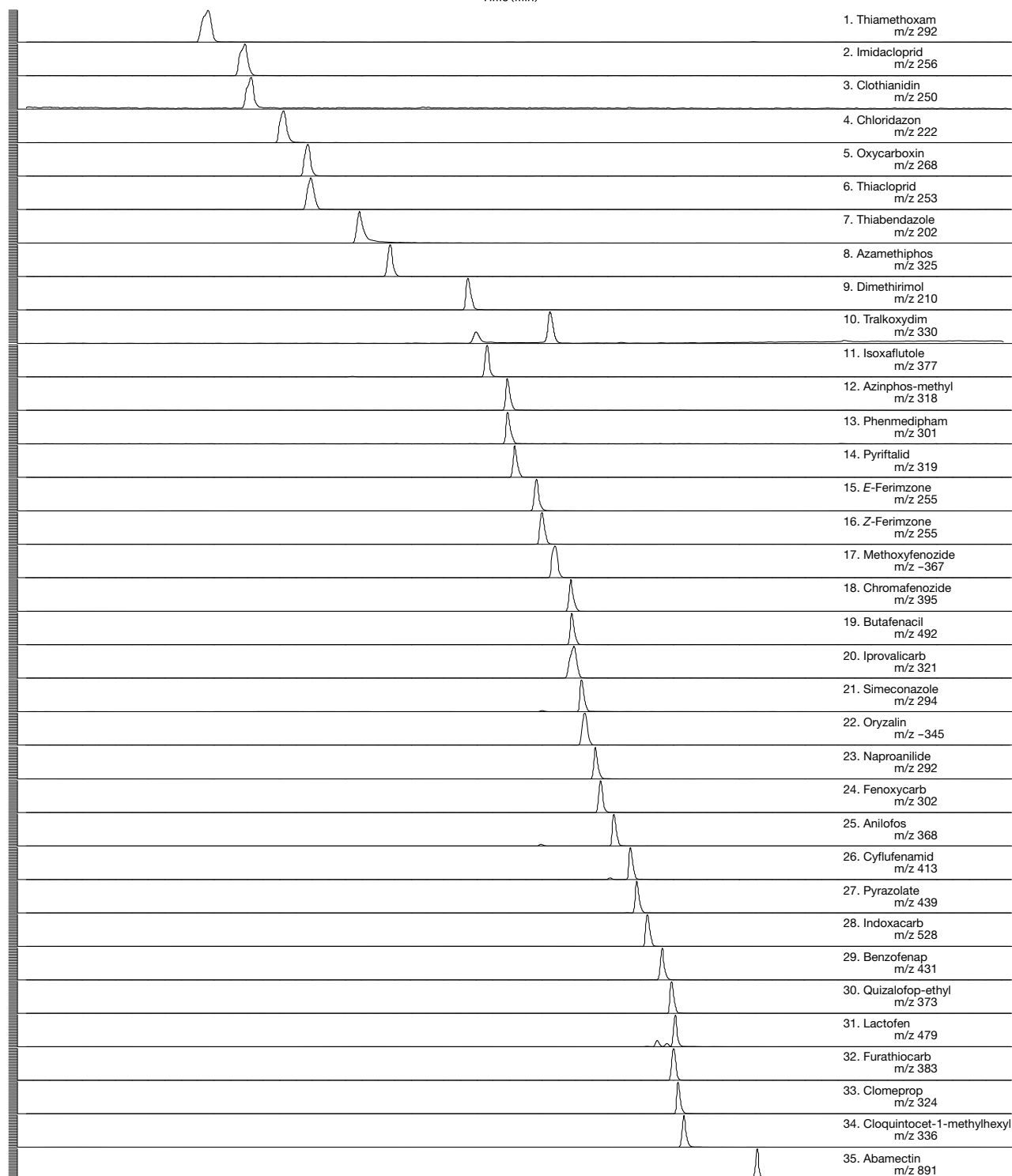
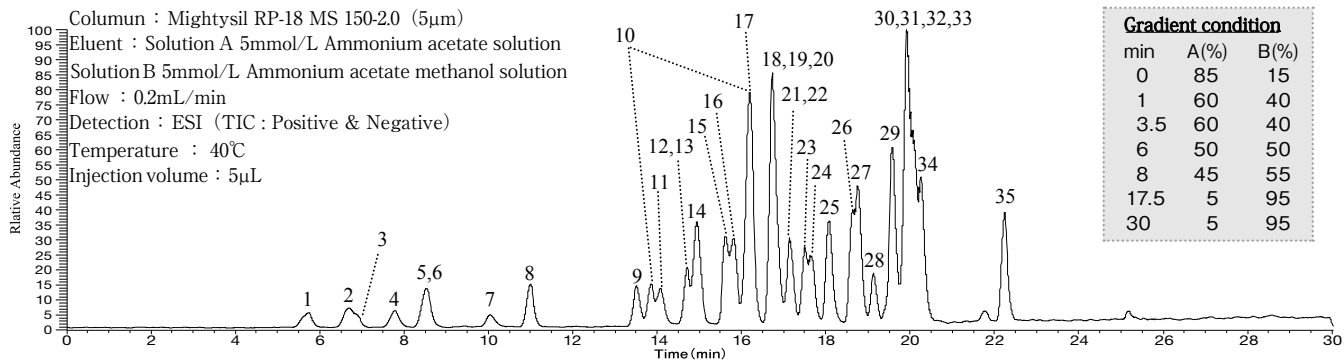
Peak No.	Product name	RT( min )	Monitor Ior( m/z )					Catalog No.	Packing
			1st	2nd	3rd	4th	5th		
12	Prometryn	26.07	241	226	184			49827-01	250 mg
13	Bromacil	26.61	231	207	205	233		49826-08	250 mg
14	Chlorthal-dimethyl ( Dacthal	26.78	301	299	332			49802-66	250 mg
15	Triflumizole	27.79	278	206	287			40278-96	200 mg
16	Chlorbenside	28.20	270	268	125			49803-60	100 mg
17	Disulfoton sulfone	28.31	213	153	125			49832-46	50mg
18	Chlorfenson	28.70	304	302	175			07214-96	200 mg
19-1	Aramite-1	28.80	334	197	185			49830-59	10mg
19-2	Aramite-2	28.80	334	197	185			49830-59	10mg
20	Tribufos(DEF)	28.80	202	169	226	258	314	49827-33	100 mg
21	Flamprop-methyl	28.80	335	276	231	105	77	49803-32	100 mg
22	Barban	28.94	222	153	125			49827-14	100 mg
19-3	Aramite-3	28.94	334	319				49830-59	10mg
19-4	Aramite-4	29.14	334	319				49830-59	10mg
23	Perthane	29.29	224	223				49827-68	100 mg
24	Carfentrazoneethyl	29.97	340	330	312	376	411	49830-92	10mg
25	Trifloxystrobin	30.00	222	186	116	206		49829-15	100 mg
26	Benalaxyl	30.07	206	148	266	325		49826-72	250 mg
27	Azamethiphos	30.14	324	217	215	183	155	49827-13	250 mg
28-1	Resmethrin-1	30.61	171	123	143			49803-48	100 mg
29	Diclofop methyl	30.61	342	340	253	281		49803-68	250 mg
28-2	Resmethrin-2	30.70	171	123	143			49803-48	100 mg
30	Mefenpyr-diethyl	30.85	255	253	299			49830-18	100 mg
31	Carbosulfan	30.94	160	118	323			49826-76	250 mg
32	Epoxiconazole	30.94	194	192	206			49830-12	100 mg
33	Etoxazole	31.31	359	300	330	344		49831-34	50mg
34	Fenamidone	31.53	268	238	311			49830-38	100 mg
35-1	Phenothrin-1	31.62	183	123				49803-87	100 mg
36	Furathiocarb	31.62	194	163	382			49827-85	250 mg
35-2	Phenothrin-2	31.73	183	123	350			49803-87	100 mg
37	Triticonazole	32.01	299	237	235			49831-47	100 mg
38	Pyrazophos	32.37	373	232	221			49827-03	250 mg
39	Benfuracarb	32.37	190	164	163	353		49803-15	100 mg
40	Boscalid	34.15	344	342	140	167		49830-24	100 mg
41	Flumioxazin	35.07	354	287	259			49831-31	100 mg
42	Thiacloprid	35.12	251	101	126	224		49829-96	100 mg
43	Pyraclostrobin	35.19	164	132	325			49829-66	100 mg
44	Flumiclorac-pentyl	36.20	423	308	318			49829-31	100 mg
45-1	Dimethomorph-1	36.52	387	303	301			49802-87	100 mg
46	Famoxadone	36.70	330	197	196	224		49861-39	100 mg
45-2	Dimethomorph-2	37.03	387	303	301			49802-87	100 mg
47	Propaquizafop	38.76	443	299	243	371		49830-70	100 mg

Catalog No.	Product name	Number of ingredient	Grade	Packing
34265-96	<i>Pesticides standard solution 52</i>	47	For pesticide residue analysis	2 mL×5

( 10 mg/L of each chemicals contained in acetone-hexane solution(1:1) 、 Freeze storage )

# Pesticides standard solution 58

## ▶ Example of analysis of pesticides standard solution 58 by Mightysil MS





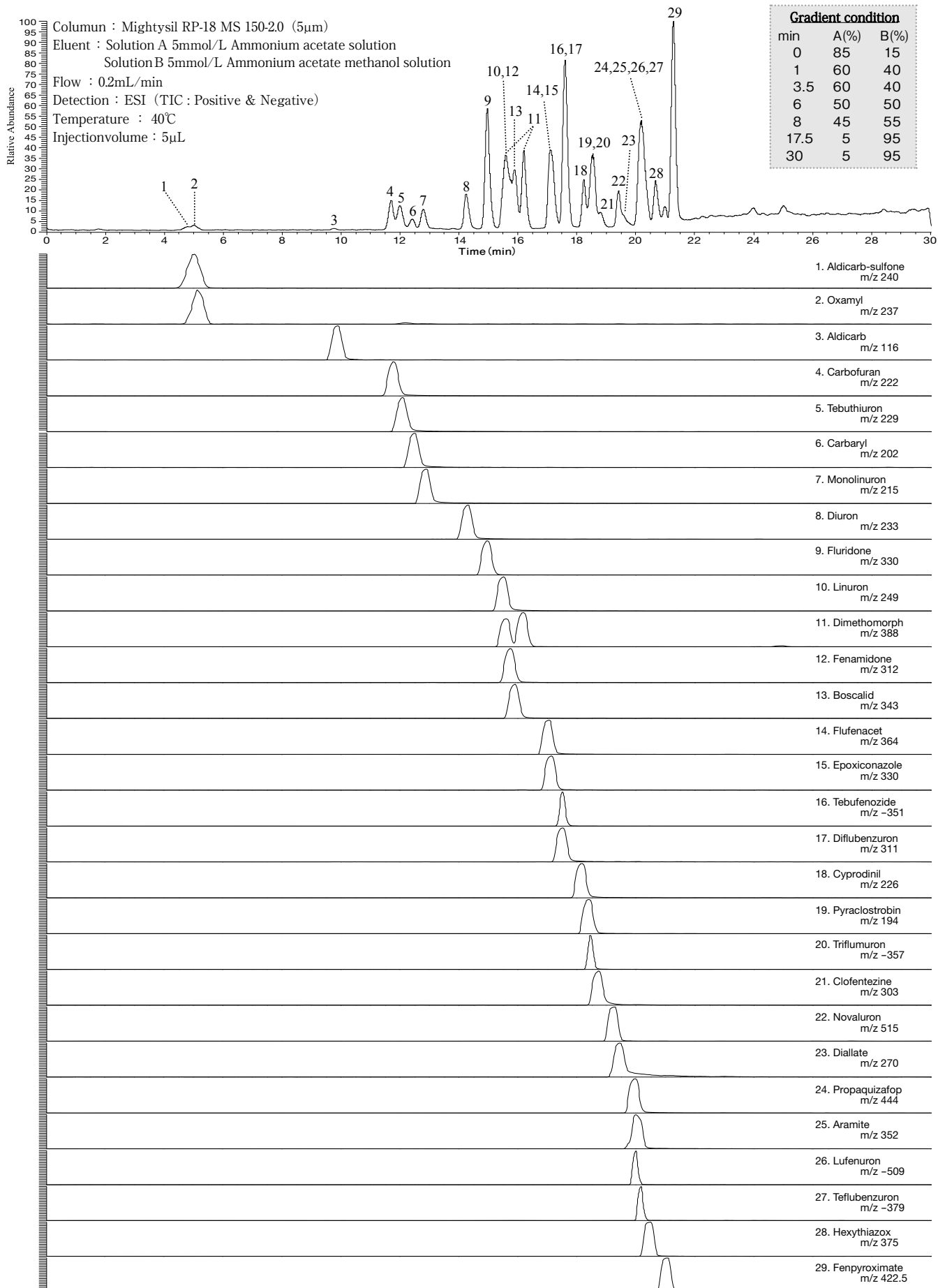
No.	Chemical compound	RT (min)	Ion measuring by LC/MS ( m/z )							Ion measuring by LC/MS ( m/z )									
			Positive				Negative			Positive				Negative					
			Quantity		Quality		Quantity	Quality		Precursor	Product (Quantity)		Product (Quality)		Precursor	Product (Quantity)		Product	
1	Thiamethoxam	5.69	292	211	314					292		211.1		181					
2	Imidacloprid	6.67	256		209	175				256		209	175						
3	Clothianidin	6.89	250		169			-248	-58	250		168.9		132					
4	Chloridazon	7.79	222		244	104	65			222		92	65	77					
5	Oxycarboxin	8.52	268		207	175				268		174.9		147					
6	Thiacloprid	8.57	253		255	126				253		126.1		90	73				
7	Thiabendazole	10.09	202		203	175				202		174.9		131					
8	Azamethiphos	11.02	325		347	215	183			325		183		112					
9	Dimethirimol	13.54	210		232	140	71			210		71		140					
10-1	Tralkoxydim-1	13.92	330		284										-328	-254	-66		
11	Isoxaflutole	14.14	377	360	283	251		-358	-359	360		251		360	144				
12	Azinphos-methyl	14.72	318	160	132					318		159.9	76.97	132					
13	Phenmedipham	14.77	301	136	168					318	301	167.9	136.1						
14	Pyrifthalid	14.98	319		320	139				319		139.1		179	93				
15	E-Ferimzone	15.72	255		277	132				255		132	91						
16	Z-Ferimzone	15.72	255		277	132	124			255		124.2	91	132					
10-2	Tralkoxydim-2	16.19	330		331	170				330		137.9		284		-328	-254		
17	Methoxyfenozide	16.23						-367	-368	-149	369		148.9		91		-367	-149	-105
18	Chromafenozide	16.75	395		175					395		175.1		339	147				
19	Butafenacil	16.80	492	475	349	331	180			492		330.9		180					
20	Iprovalicarb	16.81	321		343	119				321		119		203					
21	Simeconazole	17.16	294		295	135				294		70		73					
22	Oryzalin	17.18						-345	-346	-78						-345	-281	-78	-147
23	Naproanilide	17.54	292		293	171				292		170.9		120		-290	-143		-93
24	Fenoxycarb	17.74	302		116					302		116.2	88						
25	Anilofos	18.12	368		390	199	157			368		199.1		125					
26	Cyflufenamid	18.68	413		435	295	241			413		295.1	241.1	203					
27	Pyrazolate	18.83	439		441	173				439		91		229	173				
28	Indoxacarb	19.19	528		550	203	150			528		150		203					
29	Benzofenap	19.63	431		433	119	105			431		105.2		119					
30	Quizalofop-ethyl	19.94	373																
31	Lactofen	19.95	479		481	344				479		343.9		223					
32	Furathiocarb	19.99	383		405	252				383		252.2		195					
33	Clomeprop	20.18	324		346	120		-322	-175	324		120.3		203	105				
34	Cloquintocet-1-methyl-hexyl ester	20.31	336		358	238				336		238		192	179				
35	Abamectin	22.27	896	891	897	567	305			891		567.3	305.3	568					

Catalog No.	Product name	Number of ingredient	Grage	Packing
34271-96 34271-97	<i>Pesticides standard solution 58</i>	35	For pesticide residue analysis	2 mL×5 2 mL×1

(10/L of each chemicals contained in methanol solution、Freeze storage)

# Pesticides standard solution 53

## ▶ Example of analysis of pesticides standard solution 53 by Mightysil MS



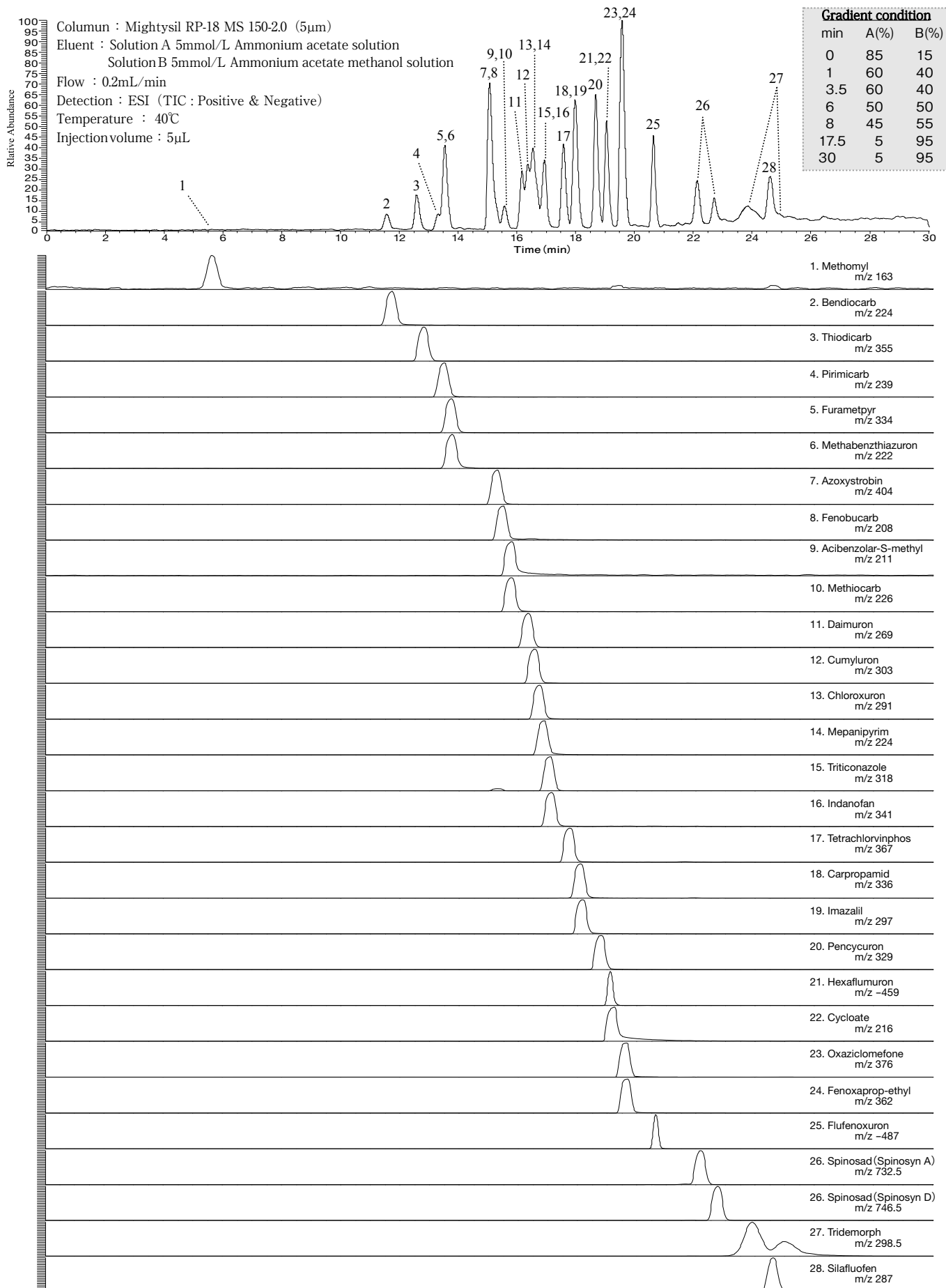
No.	Chemical compound	RT (min)	Ion measuring by LC/MS ( m/z )							Ion measuring by LC/MS/MS ( m/z )								
			Positive				Negative			Positive				Negative				
			Quantity		Quality		Quantity	Quality		Precursor	Product (Quantity)		Product (Quality)		Precursor	Product (Quantity)		Product
1	Aldicarb-sulfone	4.89								240	223	86		148	76			
2	Oxamyl	5.06								237		72		237	90			
3	Aldicarb	9.78								208		116		191	89			
4	Carbofuran	11.71								222		165		123				
5	Tebuthiuron	12.03	229		172					229		172		116				
6	Carbaryl	12.44								219	202	202	145	145	127			
7	Monolinuron	12.83	215		217	148				215		126		148				
8	Diuron	14.28								233		72		233	160			
9	Fluridone	15.00	330		352					330		310	294	259				
10	Linuron	15.53	249		251	182				249		182		160				
11-1	Dimethomorph-1	15.63								388		301		165				
12	Fenamidon	15.81	312		344					312		92		236				
13	Boscalid	15.96	343		365	345	307			343		307		140				
11-2	Dimethomorph-2	16.23								388		301		165				
14	Flufenacet	17.13	364		194					364		152		194	124			
15	Epoxiconazole	17.24								330		121		101				
16	Tebufenozide	17.62						-351	-352	353		297	133	133	105			
17	Diflubenzuron	17.62								328	311	158		311	141			
18	Cyprodinil	18.29								226		93		108	77			
19	Pyraclostrobin	18.56	388		194					388		163		105				
20	Triflumuron	18.60						-357	-154	359		156		139				
21	Clofentezine	18.88								303		138		102				
22	Novaluron	19.46	493		515					493		158		141				
23	Diallate	19.62	272		270					270		86		109				
24	Propaquizafop	20.18	444		466	446	100			444		100		163				
25	Aramite	20.21								352		191		255	57			
26	Lufenuron	20.22	511		513			-509	-511	-489						-509	-326	-175
27	Teflubenzuron	20.37						-379	-196			381		141		158		
28	Hexythiazox	20.70	353		375	355	271	228		353		228		168				
29	Fenpyroximate	21.31	422		444					422		366		214	135			

Catalog No.	Product name	Number of ingredient	Grade	Packing
34266-96 34266-97	<i>Pesticides standard solution 53</i>	29	For pesticide residue analysis	2 mL×5 2 mL×1

(10/L of each chemicals contained in methanol solution、Freeze storage)

# Pesticides standard solution 54

## ▶ Example of analysis of pesticides standard solution 54 by Mightysil MS



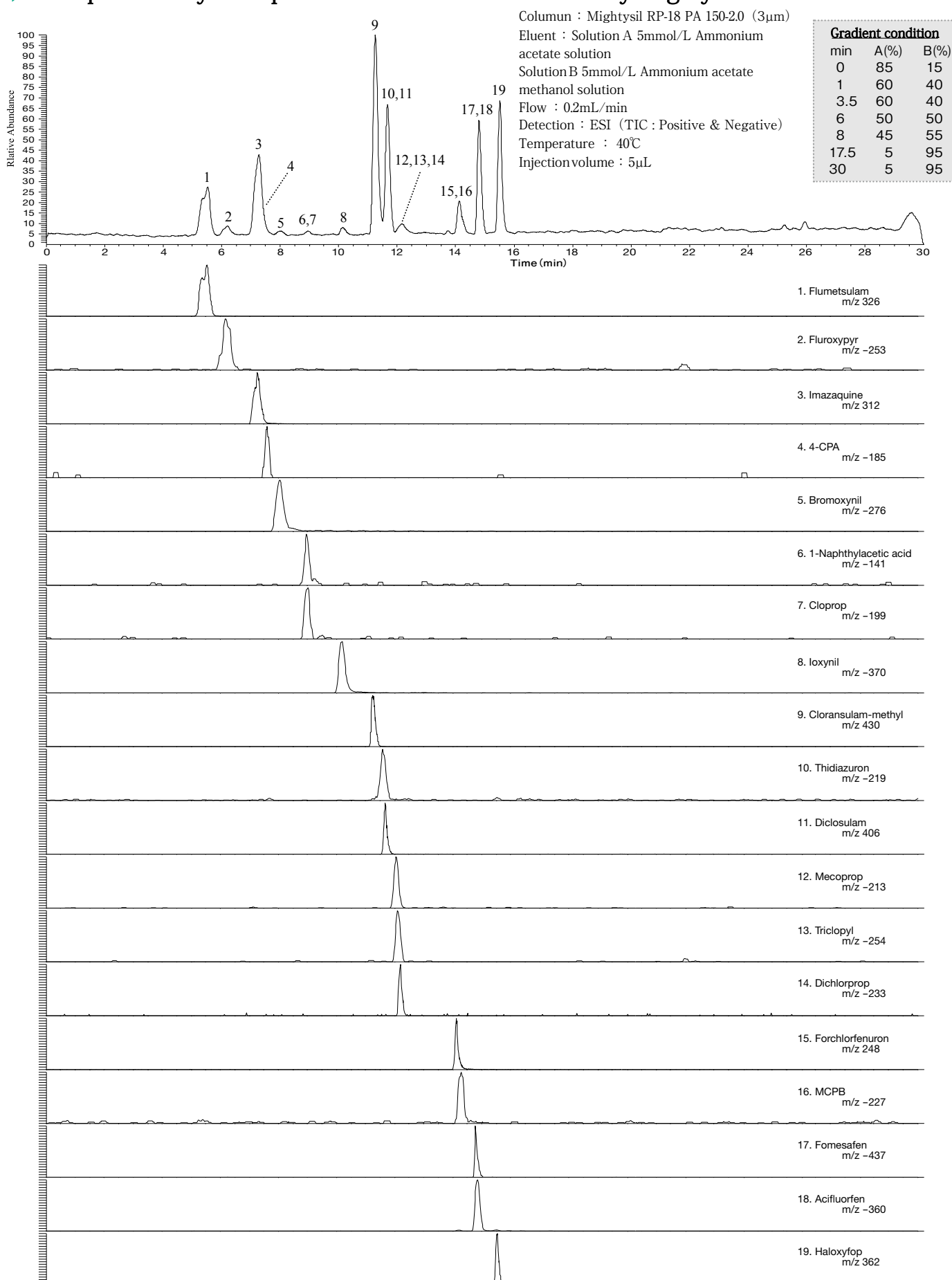
No.	Chemical compound	RT (min)	Ion measuring by LC/MS ( m/z )						Ion measuring by LC/MS/MS ( m/z )									
			Positive			Negative			Positive			Negative						
			Quantity	Quality		Quantity	Quality		Precursor	Product (Quantity)	Product (Quality)	Precursor	Product (Quantity)	Product				
1	Methomyl	5.62								163		88		106				
2	Bendiocarb	11.72	224		246	167				224		167		109				
3	Thiodicarb	12.79	354	355	377	163				355		88		108				
4	Pirimicarb	13.47	239		182					239		182	72	182	72			
5	Furametpyr	13.72	334		336	290				334		157		290				
6	Methabenzthiazuron	13.74	222		244	165				222		165		150				
7	Azoxystrobin	15.27								404		372		344				
8	Fenobucarb	15.47	230		208					208		95		152				
9	Acibenzolar-S-methyl	15.77								211		136		211	69			
10	Methiocarb	15.77	226		248	169				226		169		121				
11	Daimuron	16.32	269		291	151				269		151		91				
12	Cumyluron	16.54	303		325	185				303		185		125				
13	Chloroxuron	16.72								291		72		291	164			
14	Mepanipyrim	16.87	224		246	225				224		106		77				
15	Triticonazole	17.07	318		320	70				318		70		318	125			
16	Indanofan	17.12	341		363	175				341		175		187				
17	Tetrachlorvinphos	17.74	367		389					367		127		206				
18	Carpropamid	18.09	334		336	196				336		139		103				
19	Imazalil	18.17								297		159		255				
20	Pencycuron	18.79	329		351	331	125			329		125		89				
21	Hexaflumuron	19.10						-459	-461	-439						-459	-439	-175
22	Cycloate	19.24								216		154	83	154	83			
23	Oxaziclomefone	19.64	376		378	190				376		190		161				
24	Fenoxaprop-ethyl	19.69	362		364	288				362		288		121				
25	Flufenoxuron	20.63						-487	-489		489		158		141			
26-1	Spinosad-1 (Spinosyn A)	22.17								732		142		98				
26-2	Spinosad-2 (Spinosyn D)	22.74								746		142		98				
27-1	Tridemorph-1	23.92	298	130	299					298		130	57	98				
28	Silafluofen	24.62								426		287		168				
27-2	Tridemorph-2	24.99	298		299					298		130		98				

Catalog No.	Product name	Number of ingredient	Grade	Packing
34267-96 34267-97	<i>Pesticides standard solution 54</i>	28	For pesticide residue analysis	2 mL×5 2 mL×1

(10/L of each chemicals contained in methanol solution、Freeze storage)

# Pesticides standard solution 45

## ▶ Example of analysis of pesticides standard solution 45 by Mightysil PA



No.	Chemical compound	RT ( min )	Ion measuring by LC/MS				Ion measuring by LC/MS/MS ( m/z )								
			Positive		Negative		Positive					Negative			
			Quantity	Quality	Quantity	Quality	Precursor	Product ( Quantity )		Product ( Quality )		Precursor	Product ( Quantity )		Product ( Quality )
1	Flumetsulam	5.55	326	129			326	129		326	109				
2	Fluroxypyr	6.17			-253	-195						-253	-195		-233
3	Imazaquine	7.28	312	267			312	267.3	199	128	86				
4	4-CPA	7.62			-185	-127						-185	-127		-185
5	Bromoxynil	8.05			-276	-79						-276	-81	-78.8	-275.9
6	1-Naphthylacetic acid	8.99			-185	-141						-185	-141		-185
7	Cloprop	9.01			-199	-127						-199	-127		-71
8	Ioxynil	10.20			-370	-126						-370	-127		-215
9	Cloransulam-methyl	11.25	430	398			430	398	370.2	153					
10	Thidiazuron	11.59			-219	-100						-219.1	-100		
11	Diclosulam	11.66	406	161			406	161		378					
12	Mecoprop	12.05			-213	-141						-213	-141		-71
13	Triclopyl	12.10			-254	-196						-245	-196		-218
14	Dichlorprop	12.20			-233	-161						-233	-161		-125
15	Forchlorfenuron	14.11	248	129			248	129		93					
16	MCPB	14.31			-227	-141						-227	-141		-227
17	Fomesafen	14.79			-437	-195						-437	-195		-316.1 -222
18	Acifluorfen	14.86			-360	-316						-360	-316		-195
19	Haloxypop	15.54	362	316			362	316		288					

Catalog No.	Product name	Number of ingredient	Grade	Packing
34046-96 34046-97	<i>Pesticides standard solution 45</i>	19	For pesticide residue analysis	2 mL×5 2 mL×1

(10/L of each chemicals contained in methanol solution · Freeze storage )

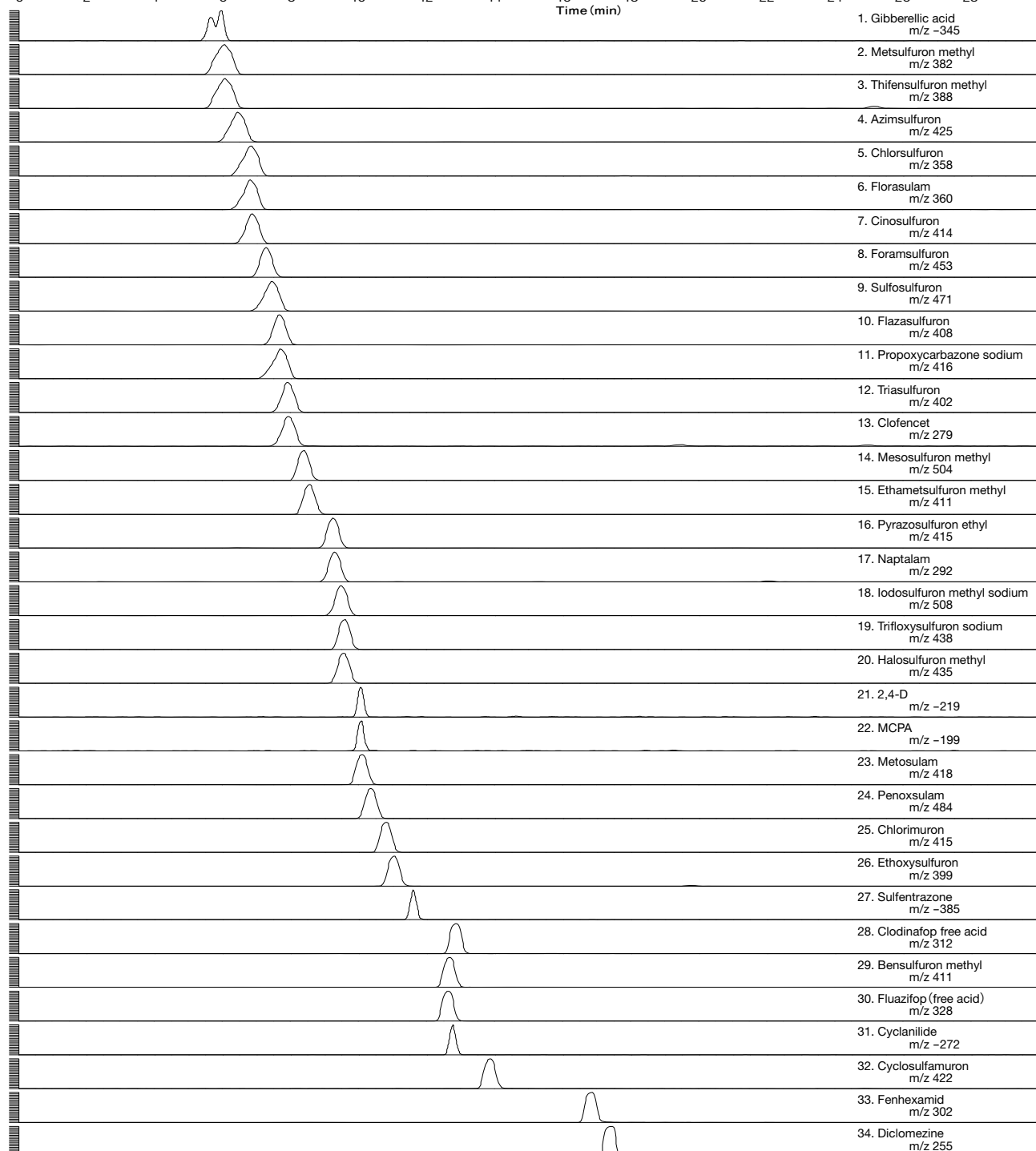
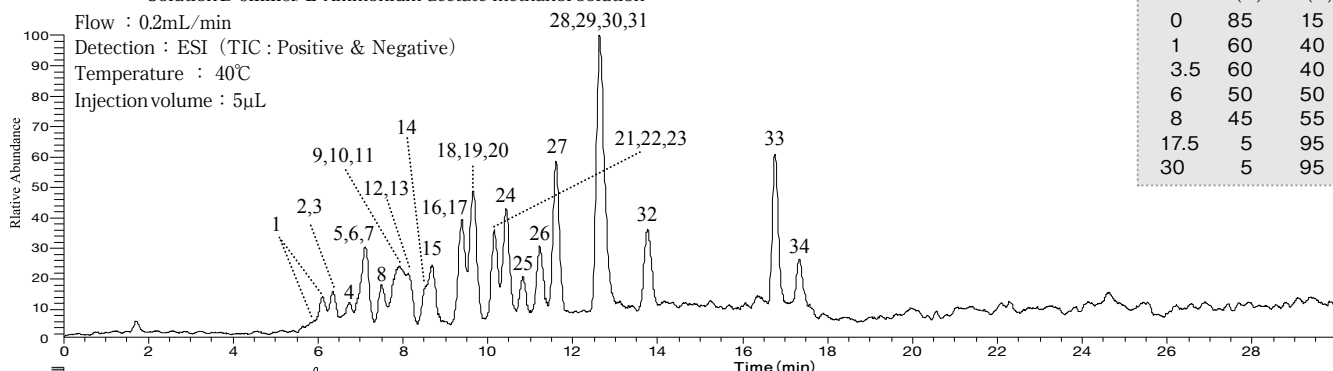
# Pesticides standard solution 55

## ▶ Example of analysis of pesticides standard solution 55 by Mightysil MS

Column : Mightysil RP-18 MS 150-20 (5 $\mu$ m)  
 Eluent : Solution A 5mmol/L Ammonium acetate solution  
 Solution B 5mmol/L Ammonium acetate methanol solution

### Gradient condition

min	A(%)	B(%)
0	85	15
1	60	40
3.5	60	40
6	50	50
8	45	55
17.5	5	95
30	5	95





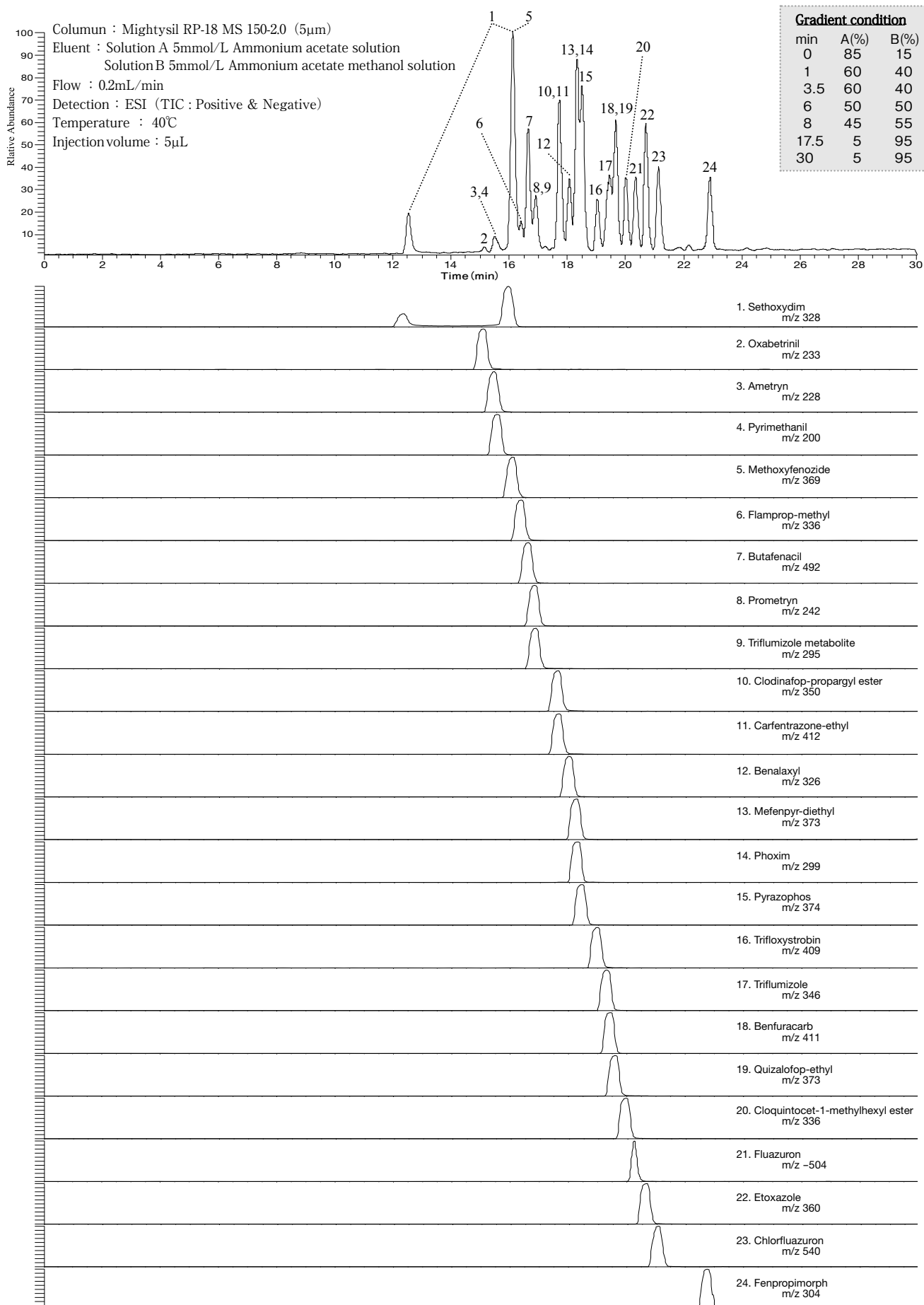
No.	Chemical compound	RT (min)	Ion measuring by LC/MS					Ion measuring by LC/MS/MS ( m/z )										
			Positive		Negative			Positive					Negative					
			Quantity	Quality	Quantity	Quality		Precursor	Product (Quantity)	Product (Quality)			Precursor	Product (Quantity)	Product (Quality)			
1-1	Gibberellic acid-1	5.97			-345	-143								-345	-143		-239	-221
1-2	Gibberellic acid-2	6.07			-345	-143								-345	-143		-239	-221
2	Metsulfuron methyl	6.24	382	404				382		168	167	198	57	-380	-139		-107	
3	Thifensulfuron methyl	6.25	388	167				388		167		126	56					
4	Azimsulfuron	6.66			-423		-424	425		182		139						
5	Chlorsulfuron	7.03	358	360				358		141		167						
6	Florasulam	7.04	360	129				360		129		360	82					
7	Cinosulfuron	7.10	414	436				414		183		157	83	-412	-154		-66	
8	Foramsulfuron	7.50	453	475				453		182		254	83	-451	-296		-267	
9	Sulfosulfuron	7.68			-469		-470	471		211		261						
10	Flazasulfuron	7.90	408	430				408		182	181	227	139	-406	-154		-251	
11	Propoxycarbazon sodium	7.93	399	416				421	399	180	115	264	134	-397	-156		-113	
12	Triasulfuron	8.14	402	404				402		167		141						
13	Clofencet	8.17	279	261				279		261		166						
14	Mesosulfuron methyl	8.55	504	526				504		182		306	83	-502	-267		-347	
15	Ethametsulfuron methyl	8.73	411	412				411		196		168						
16	Pyrazosulfuron ethyl	9.38	415	437				415		182	181	139	83	-413	-154		-232	
17	Naptalam	9.46			-290		-246	292		144		149		-290	-246		-142	
18	Iodosulfuron methyl sodium	9.62	508	509				508		167		508						
19	Trifloxysulfuron sodium	9.66			-436		-437	438		182		257						
20	Halosulfuron methyl	9.70			-433		-435	435		182		83		-433	-252		-154	-78
21	2,4-D	10.15			-161		-163							-219	-161		-125	
22	MCPA	10.17			-141		-199							-199	-141		-199	
23	Metosulam	10.18	418	420				420	418	176	174	189	140	-416	-179		-66	
24	Penoxsulam	10.46			-482			484		195		164						
25	Chlorimuron ethyl	10.86			-413		-415	415		186		83						
26	Ethoxysulfuron	11.26	399	400				399		261		218						
27	Sulfentrazone	11.61			-387		-385	387		307		146						
28	Clodinafop free acid	12.63			-310		-238	312		266		238						
29	Bensulfuron methyl	12.66	411	433				433	411	179	148	278	181	-409	-154		-254	
30	Fluazifop (free acid)	12.67	328	350				328		283	282	255	254	-326	-254		-206	
31	Cyclanilide	12.77			-272		-160							-272	-160		-228	
32	Cyclosulfamuron	13.80	422	444				422		261	139	218	69	-420	-265		-78	
33	Fenhexamid	16.81	302	304				302		97	96	55		-300	-264		-249	
34	Diclomezine	17.40	255	257				257	255	140	89	158	75	-253	-182		-40	

Catalog No.	Product name	Number of ingredient	Grade	Packing
34268-96 34268-97	<i>Pesticides standard solution 55</i>	34	For pesticide residue analysis	2 mL×5 2 mL×1

(10/L of each chemicals contained in methanol solution · Freeze storage)

# Pesticides standard solution 56

## ▶ Example of analysis of pesticides standard solution 56 by Mightysil MS



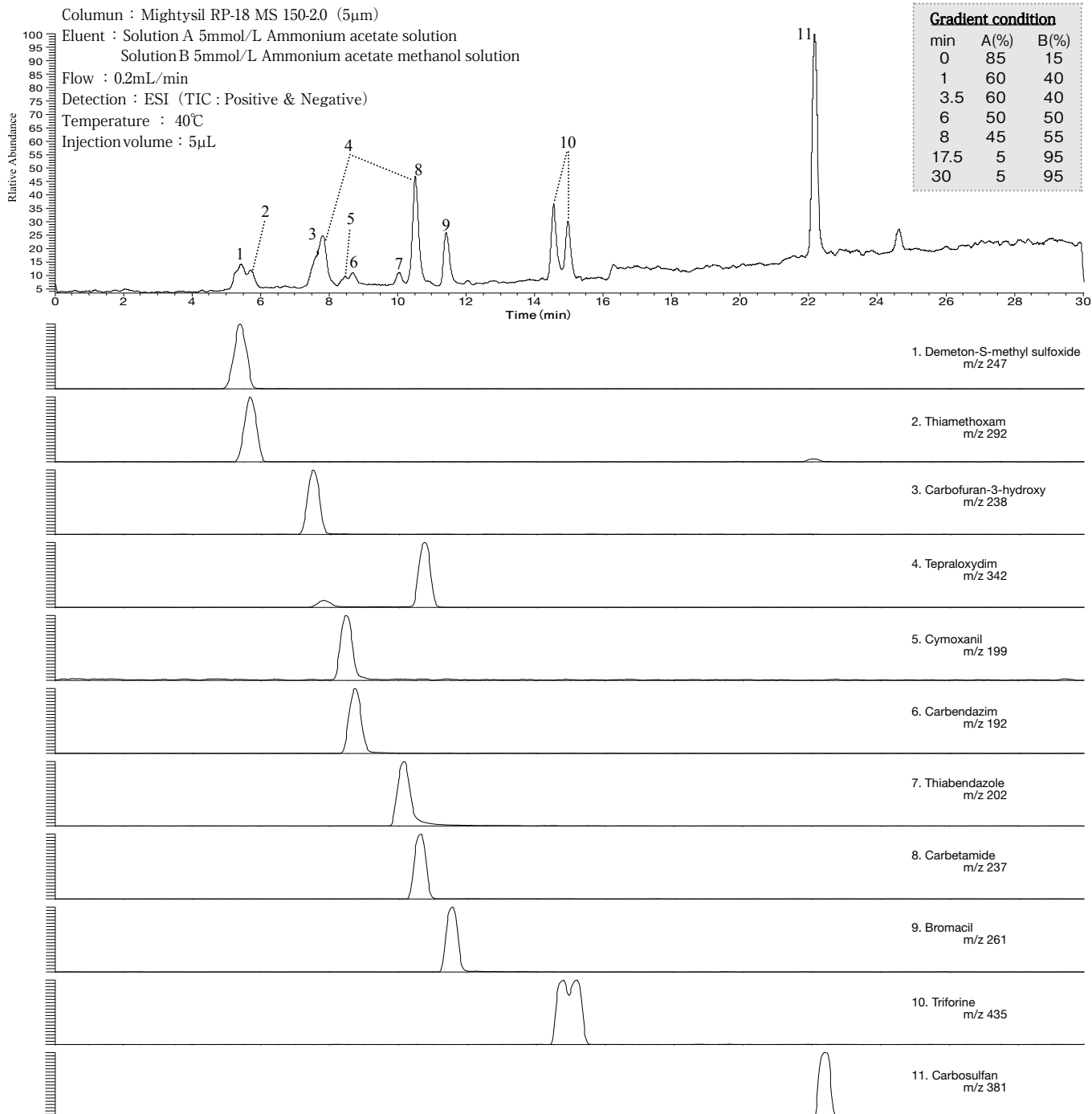
No.	Chemical compound	RT (min)	Ion measuring by LC/MS ( m/z )				Ion measuring by LC/MS/MS ( m/z )					
			Positive		Negative		Positive					
			Quantity	Quality	Quantity	Quality	Precursor		Product ( Quantity )		Product ( Quality )	
1-1	Sethoxydim-1	12.33					328		178		220	180
2	Oxabetrinil	15.08					233		147		87	77
3	Ametryn	15.43					228		186		96	
4	Pyrimethanil	15.56	200				200		107		182	
1-2	Sethoxydim-2	15.93					328		178		220	180
5	Methoxyfenozide	16.08	369	313			369		149		91	
6	Flamprop-methyl	16.36	336				336		105		77	
7	Butafenacil	16.61	492				492		331		180	
8	Prometryn	16.83	242				242		158		200	
9	Triflumizole metabolite	16.86	295									
10	Clodinafop-propargyl ester	17.63					350		266		238	91
11	Carfentrazone-ethyl	17.68					412		346		366	
12	Benalaxyl	18.01	326				326		148		294	
13	Mefenpyr-diethyl	18.28	373	375			373		327		160	
14	Phoxim	18.31	299				299		129		77	
15	Pyrazophos	18.46	374				374		222		194	
16	Trifloxystrobin	19.01	409				409		186		145	
17	Triflumizole	19.31	346				346		278		73	
18	Benfuracarb	19.43	411				411		195		190	
19	Quizalofop-ethyl	19.61					374		300	299	272	91
20	Cloquintocet-1-methylhexyl ester	19.96					337	336	239	238	193	192
21	Fluazuron	20.25			-504	-305	506		158		141	
22	Etoazole	20.66					360		141		304	177
23	Chlorfluazuron	21.11					540		383		158	
24	Fenpropimorph	22.76	304				304		147		130	

Catalog No.	Product name	Number of ingredient	Grade	Packing
34269-96	<i>Pesticides standard solution 56</i>	24	For pesticide residue analysis	2 mL×5

(10/L of each chemicals contained in methanol solution、Freeze storage)

# Pesticides standard solution 57

## ► Example of analysis of pesticides standard solution 57 by Mightysil MS



No.	Chemical compound	RT ( min )	Ion measuring by LC/MS		Ion measuring by LC/MS/MS ( m/z )					
			Positive		Positive					
			Quantity	Quality	Precursor		Product(Quantity)		Product ( Quality )	
1	Demeton-S-methyl sulfoxide	5.38			247		169		109	105
2	Thiamethoxam	5.68			292		211		246	181
3	Carbofuran-3-hydroxy	7.51			238		163		181	
4-1	Tepaloxymid-1	7.81			342		250		166	
5	Cymoxanil	8.46			199		128		111	
6	Carbendazim	8.73			192		160		132	
7	Thiabendazole	10.13			202		175		131	
8	Carbetamide	10.63			237		192	118	120	118
4-2	Tepaloxymid-2	10.76			342		250		166	
9	Bromacil	11.56	263	205	261		205		188	
10-1	Triforine-1	14.76	390	392	435		390		97	
10-2	Triforine-2	15.16	390	392	435		390		97	
11	Carbosulfan	22.41			382	381	118		160	

Catalog No.	Product name	Number of ingredient	Grade	Packing
34270-96	<i>Pesticides standard solution 57</i>	11	For pesticide residue analysis	2 mL×5

(10/L of each chemicals contained in methanol solution · Freeze storage )



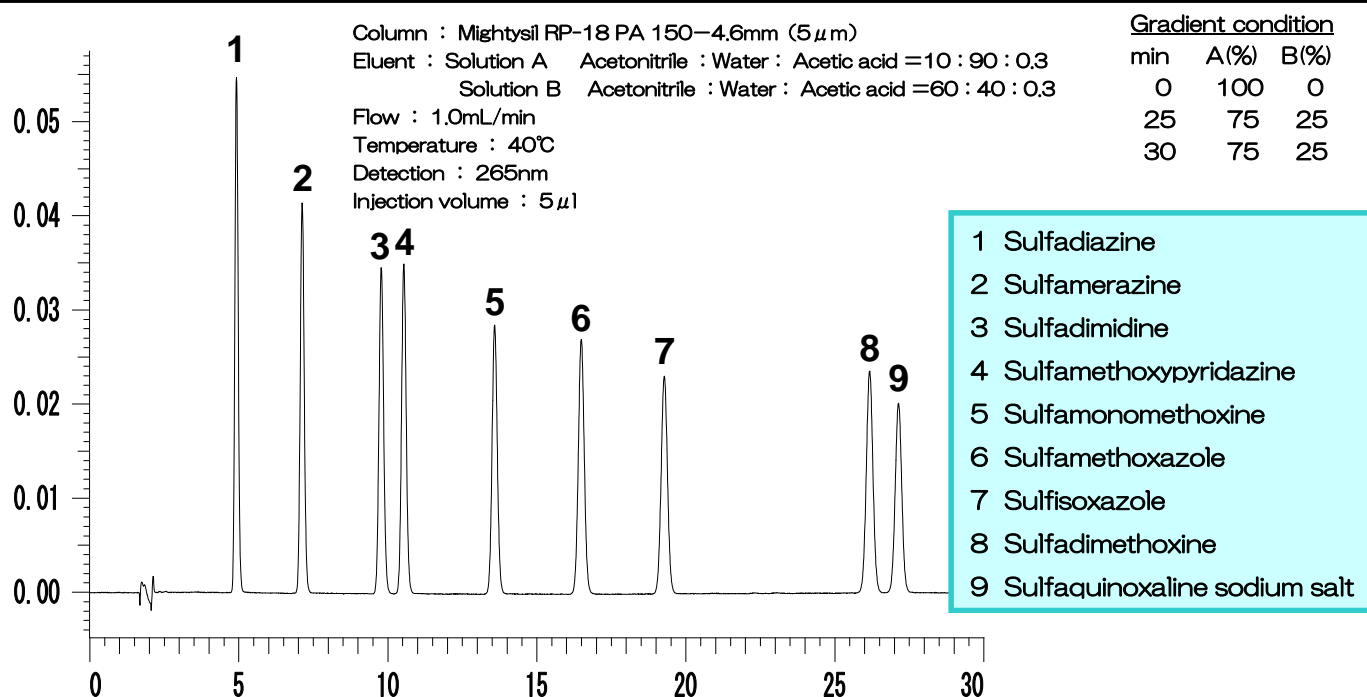
# Food analysis mixed standard solution

## ● Product range

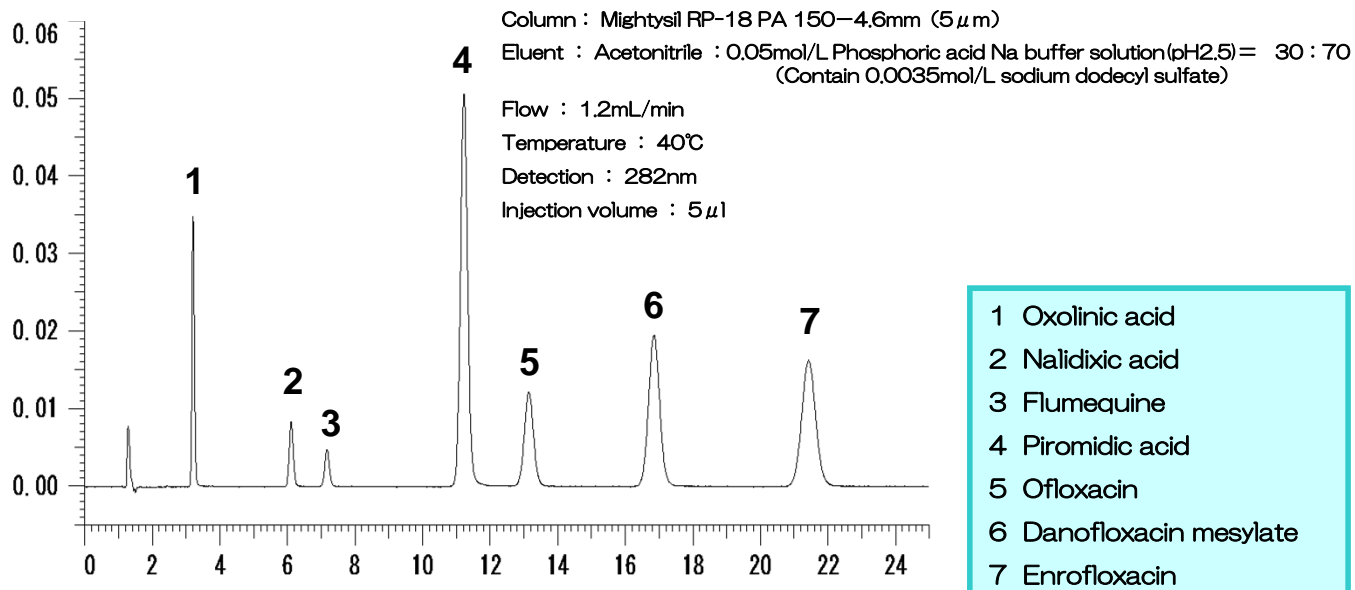
Catalog No.	Product name	Standards	Packing
16246-96	Food analysis mixed standard solution 1 (Sulfa drug LC covered 9types)	For food analyses	5mL × 5
<Composition>			
Sulfadiazine	Sulfamethoxypyridazine	Sulfisoxazole	
Sulfamerazine	Sulfamonomethoxine	Sulfadimethoxine	
Sulfadimidine	Sulfamethoxazole	Sulfaquinoxaline sodium salt	
(Each 10mg/L Methanol solution)			

Catalog No.	Product name	Standards	Packing
16247-96	Food analysis mixed standard solution 2 (Quinolone LC covered 7types)	For food analyses	5mL × 5
<Composition>			
Oxolinic acid	Flumequine	Danofloxacin mesylate	
Nalidixic acid	Enrofloxacin	Ofloxacin	
Piromidic acid			
(Each 10mg/L 0.01mol/L NaOH : Methanol solution (4 : 96) )			

## Example of analysis of “Food analysis mixed standard solution 1” by Mightysil RP-18 PA



## Example of analysis of “Food analysis mixed standard solution 2” by Mightysil RP-18 PA



### ● Related products (Standard products )

Catalog No.	Product name	Standard	Size
37459-96	Sulfadiazine	For food analyses	500mg
37463-96	Sulfamerazine	For food analyses	500mg
37461-96	Sulfadimidine	For food analyses	500mg
37465-96	Sulfamethoxypyridazine	For food analyses	500mg
37466-96	Sulfamonomethoxine	For food analyses	500mg
37464-96	Sulfamethoxazole	For food analyses	500mg
49832-21	Sulfisoxazole	For food analyses	250mg
37460-96	Sulfadimethoxine	For food analyses	500mg
37467-96	Sulfaquinoxaline sodium salt	For food analyses	500mg
31055-96	Oxolinic acid	For food analyses	500mg
28420-96	Nalidixic acid	For food analyses	500mg
32251-96	Piromidic acid	For food analyses	500mg
16075-96	Flumequine	For food analyses	500mg
14011-96	Enrofloxacin	For food analyses	500mg
10783-96	Danofloxacin mesylate	For food analyses	500mg
31025-96	Ofloxacin	For food analyses	500mg

### ● Related products (Column)

Catalog No.	Product name	Size
25419-96	Mightysil RP-18 PA 250mm-4.6mm (5 μm)	1pk
25420-96	Mightysil RP-18 PA 150mm-4.6mm (5 μm)	1pk
25421-96	Mightysil RP-18 PA 5mm-4.6mm (5 μm)	1pk (10PCS)



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