



Accurate Mass Pesticide Database by GC-HRMS



1. Scope

This report shows a database of 92 pesticides by using gas chromatography high resolution mass spectrometry (GC-HRMS).

2. Analytical conditions for the GC-HRMS

Settings for gas chromatography:

- Inlet: splitless mode
- Inlet temperature: 280 °C
- Injection volume: 2 µL
- Constant flow: 1.2 mL/min
- Carrier gas: Helium
- Two online columns: HP-5MSUI (15m x 0.250mm x 0.250µm)
- Oven gradient:

Rate (°C/min)	Time (min)	Hold Time (min)	T (°C)
	60	1	1
40	120	0	2.5
5	310	0	40.5

Settings for mass spectrometer:

- Resolution: 2GHz
- Ion source: 280 °C
- Transfer line: 280 °C
- Electron ionization

NOTE

IF YOU NEED THIS DATABASE IN .csv, .xls, ... PLEASE, CONTACT WITH

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3. HRMS Database

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Ametryn	C ₉ H ₁₇ N ₅ S	18.47	227.1199
Ametryn F1	C ₈ H ₁₄ N ₅ S	18.47	212.0964
Ametryn F2	C ₆ H ₉ N ₅ S	18.47	183.0573
Ametryn F3	C ₅ H ₈ N ₅ S	18.47	170.0495
Azinphos Methyl	C ₁₀ H ₁₂ N ₃ O ₃ PS ₂	29.38	317.0052
Azinphos Methyl F1	C ₈ H ₆ N ₃ O	29.38	160.0505
Azinphos Methyl F2	C ₇ H ₄ O	29.38	104.0257
Benalaxyl	C ₂₀ H ₂₃ NO ₃	26.00	325.1672
Benalaxyl F1	C ₁₈ H ₂₀ NO	26.00	266.1539
Benalaxyl F2	C ₁₃ H ₁₆ NO ₃	26.00	234.1125
Benalaxyl F3	C ₁₁ H ₁₄ NO	26.00	176.1070
Benalaxyl F4	C ₁₂ H ₁₆ NO ₂	26.00	206.1176
Benalaxyl F5	C ₁₀ H ₁₄ N	26.00	148.1121
Bifenthrin	C ₂₃ H ₂₂ ClF ₃ O ₂	28.33	422.1255
Bifenthrin F1	C ₁₄ H ₁₃	28.33	181.1012
Bifenthrin F2	C ₁₈ H ₈	28.33	152.0621
Bifenthrin F3	C ₁₃ H ₁₁	28.33	166.0988
Boscalid	C ₁₈ H ₁₂ Cl ₂ N ₂ O	33.38	342.0321
Boscalid F1	C ₆ H ₃ ClNO	33.38	139.9898
Boscalid F2	C ₅ H ₃ ClN	33.38	111.9949
Bromopropylate	C ₁₇ H ₁₆ Br ₂ O ₃	28.12	425.9461
Bromopropylate F1	C ₁₃ H ₉ Br ₂ O	28.12	338.9015
Bromopropylate F2	C ₇ H ₄ BrO	28.12	182.9440
Bromopropylate F3	C ₆ H ₄ Br	28.12	154.9491
Bromuconazole	C ₁₃ H ₁₂ BrCl ₂ N ₃ O	27.92	374.9535
Bromuconazole F1	C ₁₀ H ₈ BrCl ₂ O	27.92	292.9130
Bromuconazole F2	C ₁₃ H ₁₂ Cl ₂ N ₃ O	27.92	296.0352
Bromuconazole F3	C ₁₀ H ₉ Cl ₂ O	27.92	215.0025
Bromuconazole F4	C ₇ H ₃ Cl ₂ O	27.92	172.9555
Bupirimate	C ₁₃ H ₂₄ N ₄ O ₃ S	24.02	316.1564
Bupirimate F1	C ₁₀ H ₁₇ N ₄ O ₃ S	24.02	273.1016
Bupirimate F2	C ₁₁ H ₁₈ N ₃ O	24.02	208.1444
Bupirimate F3	C ₅ H ₄ N ₂ O	24.02	108.0318
Buprofezin	C ₁₆ H ₂₃ N ₃ OS	23.85	305.1556
Buprofezin F1	C ₉ H ₉ N ₂ S	23.85	177.0481
Buprofezin F2	C ₇ H ₅ NO	23.85	119.0366
Buprofezin F3	C ₇ H ₈ N	23.85	106.0651
Buprofezin F4	C ₇ H ₁₁ N ₂ OS	23.85	171.0587
Buprofezin F5	C ₈ H ₁₆ N ₂ S	23.85	172.1029
Buprofezin F6	C ₁₀ H ₁₁ N ₂ O	23.85	175.0866
Butralin	C ₁₄ H ₂₁ N ₃ O ₄	20.65	295.1527
Butralin F1	C ₁₄ H ₂₀ N ₃ O ₂	20.65	262.1550
Butralin F2	C ₁₂ H ₁₆ N ₃ O ₄	20.65	266.1135
Butralin F3	C ₁₄ H ₂₁ N ₂ O ₂	20.65	249.1598
Butralin F4	C ₁₄ H ₁₉ N ₃ O ₃	20.65	277.1421
Butralin F5	C ₉ H ₁₀ N ₃ O ₄	20.65	224.0666

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Cadusafos	C10H23O2PS2	14.08	270.0872
Cadusafos F1	C6H14O2PS2	14.08	213.0167
Cadusafos F2	H5O2PS2	14.08	131.9463
Cadusafos F3	H4OPS2	14.08	114.9436
Cadusafos F4	C2H8O2PS2	14.08	158.9698
Cadusafos F5	H2O2PS	14.08	96.9508
Carbofuran	C12H15NO3	15.18	221.1046
Carbofuran F1	C10H12O2	15.18	164.0832
Carbofuran F2	C10H12O	15.18	148.0883
Carbofuran F3	C9H7O	15.18	131.0491
Carbofuran F5	C9H9O2	15.18	149.0598
Carbophenothion	C9H11CIOPS3	25.88	296.9393
Carbophenothion F1	C5H12O2PS2	25.88	199.0011
Carbophenothion F2	C7H6ClS	25.88	156.9873
Carbophenothion F3	C4H10O2PS	25.88	153.0134
Chinomethionate	C10H6N2OS2	21.92	233.9916
Chinomethionate F1	C9H6N2S2	21.92	205.9967
Chinomethionate F2	C9H6N2S	21.92	174.0246
Chinomethionate F3	C8H6NS	21.92	148.0215
Chlorbromuron	C9H10N2O2ClBr	21.22	291.9609
Chlorbromuron F1	C7H4NOClBr	21.22	231.9159
Chlorbromuron F2	C6H4NClBr	21.22	203.9210
Chlorbromuron F3	C6H4NCl	21.22	125.0027
Chlorobenzilate	C16H14O3Cl2	24.64	324.0315
Chlorobenzilate F1	C13H9OCl2	24.64	251.0025
Chlorobenzilate F2	C7H6OCl	24.64	141.0102
Chlorobenzilate F3	C6H4Cl	24.64	110.9996
Chlorobenzilate F4	C7H4ClO	24.64	138.9945
Chlorpropham	C10H12N1O2ClI	13.34	213.0551
Chlorpropham F1	C7H6NO2Cl	13.34	171.0082
Chlorpropham F2	C7H5NOCl	13.34	154.0054
Chlorpropham F3	C6H6ClN	13.34	127.0184
Chlozolinate	C13H11NO5Cl2	21.42	331.0009
Chlozolinate F1	C10H7NO3Cl2	21.42	258.9797
Chlozolinate F2	C7H3Cl2NO	21.42	186.9586
Chlozolinate F3	C5H5NO3	21.42	127.0264
Clorpyrifos	C9H11NO3PSCI3	20.00	348.9257
Clorpyrifos F1	C9H11NO3PSCI2	20.00	313.9569
Clorpyrifos F2	C5H3NO3PSCI2	20.00	257.8943
Clorpyrifos F3	C7H7NO3PSCI2	20.00	285.9256
Clorpyrifos F4	C5H2Cl3NO	20.00	196.9196
Clorpyrifos Methyl	C7H7NO3P1S1Cl3	18.12	320.8944
Clorpyrifos Methyl F1	C7H7NO3PSCI2	18.12	285.9256
Clorpyrifos Methyl F2	C2H6O2PS	18.12	124.9821
Clorpyrifos Methyl F3	C2H4OPS	18.12	106.9715
Diazinon	C12H21N2O3PS	16.43	304.1005
Diazinon F1	C10H16N2O3PS	16.43	275.0614
Diazinon F2	C8H12N2O3PS	16.43	247.0301
Diazinon F3	C10H16N2O2P	16.43	227.0944

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Diazinon F4	C8H12N2O2P	16.43	199.0631
Diazinon F5	C7H9N2O	16.43	137.0710
Diazinon F6	C8H12N2O	16.43	152.0945
Dichlofluanid	C9H11N2O2S2Cl2F	19.45	331.9618
Dichlofluanid F1	C7H5N1S1Cl2F	19.45	223.9498
Dichlofluanid F2	C8H11N2S1	19.45	167.0637
Dichlofluanid F3	C6H5N1S1	19.45	123.0137
Dichlofluanid F4	C6H5NO2S	19.45	169.0066
Dichlorvos	C4H7O4P1Cl2	6.16	219.9454
Dichlorvos F1	C4H7O4P1Cl1	6.16	184.9765
Dichlorvos F2	C2H6O3P1	6.16	109.0049
Dichlorvos F3	C2H3Cl2OP	6.16	143.9293
Dicloran	C6H4N2O2Cl2	14.78	205.9644
Dicloran F1	C6H4N2Cl2	14.78	173.9746
Dicloran F2	C6H4N1Cl2	14.78	159.9715
Dicloran F3	C6H3ClN	14.78	123.9949
Endosulfan alpha	C9H6Cl6O3S	22.43	403.8163
Endosulfan alpha F1	C9H5Cl6O	22.43	338.8466
Endosulfan alpha F2	C8H4Cl5	22.43	274.8750
Endosulfan alpha F3	C5Cl5	22.43	234.8437
Endosulfan beta	C9H6Cl6O3S	24.52	403.8163
Endosulfan beta F1	C9H5Cl6O	24.52	338.8466
Endosulfan beta F2	C8H4Cl5	24.52	274.8750
Endosulfan beta F3	C5Cl5	24.52	234.8437
Endosulphan Sulphate	C9H6Cl6O4S	26.08	419.8112
Endosulphan Sulphate F1	C9H6Cl5O4S	26.08	384.8424
Endosulphan Sulphate F2	C5Cl6	26.08	269.8126
Endosulphan Sulphate F3	C5Cl5	26.08	234.8437
Endrin	C12H8Cl6O	24.17	377.8701
Endrin F1	C12H8Cl5O	24.17	342.9012
Endrin F2	C12H8Cl4O	24.17	307.9324
Endrin F3	C12H8Cl3O	24.17	272.9635
Endrin F4	C12H8Cl2O	24.17	237.9947
Endrin F5	C12H8ClO	24.17	203.0258
Endrin F6	C12H8O	24.17	168.0570
Ethofumesate	C13H18O5S1	19.33	286.0869
Ethofumesate F1	C12H15O3	19.33	207.1016
Ethofumesate F2	C10H11O3	19.33	179.0703
Ethofumesate F3	C10H9O2	19.33	161.0597
Ethoprophos	C8H19O2PS2	13.01	242.0559
Ethoprophos F1	C5H12O2PS2	13.01	199.0011
Ethoprophos F2	C2H7O2PS2	13.01	157.9620
Ethoprophos F3	C3H8O2PS	13.01	138.9977
Ethoprophos F4	H2O2PS	13.01	96.9508
Ethoprophos F5	H3OPS2	13.01	113.9357
Ethoxyquin	C14H19NO	15.03	217.1461
Ethoxyquin F1	C13H16NO	15.03	202.1226
Ethoxyquin F2	C11H12NO	15.03	174.0913
Ethoxyquin F3	C10H10N	15.03	144.0808

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Etofenprox	C ₂₅ H ₂₈ O ₃	33.94	376.2033
Etofenprox F1	C ₁₁ H ₁₅ O	33.94	163.1117
Etofenprox F2	C ₉ H ₁₁ O	33.94	135.0804
Etofenprox F3	C ₇ H ₇ O	33.94	107.0491
Etofenprox F4	C ₁₃ H ₁₁ O	33.94	183.0805
Etrimfos	C ₁₀ H ₁₇ N ₂ O ₄ PS	16.98	292.0641
Etrimfos F1	C ₉ H ₁₄ N ₂ O ₄ PS	16.98	277.0406
Etrimfos F2	C ₈ H ₁₂ N ₂ O ₄ PS	16.98	263.0250
Etrimfos F3	C ₅ H ₁₀ O ₃ PS	16.98	181.0083
Etrimfos F4	C ₈ H ₁₂ N ₂ O	16.98	152.0944
Etrimfos F5	C ₂ H ₆ O ₂ PS	16.98	124.9821
Fenarimol	C ₁₇ H ₁₂ Cl ₂ N ₂ O	30.34	330.0321
Fenarimol F1	C ₁₃ H ₉ Cl ₂ O	30.34	251.0025
Fenarimol F2	C ₁₁ H ₈ ClN ₂ O	30.34	219.0320
Fenarimol F3	C ₇ H ₄ ClO	30.34	138.9945
Fenitrothion	C ₉ H ₁₂ NO ₅ PS	19.19	277.0168
Fenitrothion F1	C ₉ H ₁₁ NO ₄ PS	19.19	260.0141
Fenitrothion F2	C ₂ H ₆ O ₂ PS	19.19	124.9821
Fenitrothion F3	C ₂ H ₆ O ₃ P	19.19	109.0049
Fenpropathrin	C ₂₂ H ₂₃ NO ₃	28.51	349.1672
Fenpropathrin F1	C ₁₃ H ₉ O	28.51	181.0653
Fenpropathrin F2	C ₉ H ₁₂ O ₂	28.51	152.0832
Fenpropathrin F3	C ₇ H ₁₃	28.51	97.1012
Fenpropathrin F4	C ₁₆ H ₁₁ NO ₃	28.51	265.0733
Fenthion	C ₁₀ H ₁₅ O ₃ PS ₂	19.91	278.0195
Fenthion F1	C ₂ H ₆ O ₃ P	19.91	109.0049
Fenthion F2	C ₂ H ₆ O ₂ PS	19.91	124.9821
Fenthion F3	C ₈ H ₉ S ₂	19.91	169.0140
Fluazifop-p-Butyl	C ₁₉ H ₂₀ F ₃ NO ₄	24.47	383.1339
Fluazifop-p-Butyl F1	C ₁₄ H ₁₁ F ₃ NO ₂	24.47	282.0736
Fluazifop-p-Butyl F2	C ₁₂ H ₇ F ₃ NO ₂	24.47	254.0423
Fluazifop-p-Butyl F3	C ₁₉ H ₁₈ F ₃ NO ₃	24.47	365.1233
Flutolanil	C ₁₇ H ₁₆ F ₃ NO ₂	23.15	323.1128
Flutolanil F1	C ₁₄ H ₁₀ F ₃ NO ₂	23.15	281.0658
Flutolanil F2	C ₈ H ₄ F ₃ O	23.15	173.0209
Flutolanil F3	C ₇ H ₄ F ₃	23.15	145.0260
Hexaconazole	C ₁₄ H ₁₇ Cl ₂ N ₃ O	23.02	313.0743
Hexaconazole F1	C ₈ H ₆ Cl ₂ N ₃	23.02	213.9933
Hexaconazole F2	C ₃ H ₄ N ₃	23.02	82.0400
Hexaconazole F3	C ₁₂ H ₁₇	23.02	161.1325
Hexaconazole F4	C ₇ H ₅ Cl ₂ O	23.02	174.9712
Hexaconazole F5	C ₁₁ H ₁₃ Cl ₂ O	23.02	231.0338
Hexaconazole F7	C ₁₀ H ₈ Cl ₂ N ₃ O	23.02	256.0039
Iprodione	C ₁₃ H ₁₃ Cl ₂ N ₃ O ₃	27.81	329.0328
Iprodione F1	C ₁₂ H ₁₀ Cl ₂ N ₃ O ₃	27.81	314.0094
Iprodione F2	C ₉ H ₇ Cl ₂ N ₂ O ₂	27.81	244.9879
Iprodione F3	C ₇ H ₃ Cl ₂ NO	27.81	186.9586
Lindan	C ₄ H ₇ Cl ₂ O ₄ P	15.58	219.9454
Lindan F1	C ₄ H ₇ ClO ₄ P	15.58	184.9765

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Lindan F2	C ₂ H ₆ O ₃ P	15.58	109.0049<
Malathion	C ₁₀ H ₁₉ O ₆ PS ₂	19.65	330.0355
Malathion F1	C ₈ H ₁₃ O ₄	19.65	173.0808
Malathion F2	C ₂ H ₆ O ₂ PS	19.65	124.9821
Malathion F3	C ₅ H ₇ O ₂	19.65	99.0441
Malathion F4	C ₂ H ₇ O ₂ PS ₂	19.65	157.9620
Malathion F5	C ₆ H ₇ O ₃	19.65	127.0390
Metalaxyl	C ₁₅ H ₂₁ NO ₄	18.65	279.1465
Metalaxyl F1	C ₁₄ H ₁₉ NO ₃	18.65	249.1359
Metalaxyl F2	C ₁₂ H ₁₆ NO ₂	18.65	206.1176
Metalaxyl F3	C ₁₁ H ₁₄ NO ₂	18.65	192.1019
Metalaxyl F4	C ₆ H ₁₀ NO ₄	18.65	160.0604
Metalaxyl F5	C ₁₃ H ₁₈ NO ₂	18.65	220.1332
Metalaxyl F6	C ₁₃ H ₁₆ NO ₃	18.65	234.1125
Metalaxyl F7	C ₉ H ₁₀ N	18.65	132.0808
Methamidophos	C ₂ H ₈ NO ₂ PS	5.85	141.0008
Methamidophos F1	CH ₅ NO ₂ PS	5.85	125.9773
Methamidophos F2	CH ₅ NO ₂ P	5.85	94.0052
Methidathion	C ₆ H ₁₁ N ₂ O ₄ PS ₃	22.11	301.9613
Methidathion F1	C ₃ H ₉ O ₂ PS ₂	22.11	171.9776
Methidathion F2	C ₄ H ₅ N ₂ O ₂ S	22.11	145.0066
Methidathion F3	C ₂ H ₆ O ₂ PS	22.11	124.9821
Methidathion F4	C ₃ H ₅ N ₂ O	22.11	85.0397
Methidathion F5	C ₂ H ₆ O ₂ P	22.11	93.0100
Methiocarb	C ₁₁ H ₁₅ NO ₂ S	19.16	225.0818
Methiocarb F1	C ₉ H ₁₂ OS	19.16	168.0603
Methiocarb F2	C ₈ H ₉ OS	19.16	153.0369
Methiocarb F3	C ₇ H ₉ O	19.16	109.0648
Methiocarb F4	C ₆ H ₆ O	19.16	94.0413
Myclobutanil	C ₁₅ H ₁₇ CIN ₄	23.74	288.1136
Myclobutanil F1	C ₁₂ H ₁₀ CIN ₄	23.74	245.0589
Myclobutanil F2	C ₁₂ H ₁₃ CIN	23.74	206.0731
Myclobutanil F3	C ₈ H ₅ CIN	23.74	150.0106
Myclobutanil F4	C ₉ H ₈ CIN ₂	23.74	179.0371
Napropamide	C ₁₇ H ₂₁ NO ₂	22.97	271.1567
Napropamide F1	C ₁₂ H ₁₁ O	22.97	171.0804
Napropamide F2	C ₁₀ H ₈ O	22.97	144.0570
Napropamide F3	C ₇ H ₁₄ NO	22.97	128.1070
Napropamide F4	C ₅ H ₁₀ NO	22.97	100.0757
Napropamide F5	C ₄ H ₁₀ N	22.97	72.0808
Nuarimol	C ₁₇ H ₁₂ CIFN ₂ O	26.78	314.0617
Nuarimol F1	C ₁₃ H ₉ CIFN ₂ O	26.78	235.0320
Nuarimol F2	C ₁₁ H ₈ FN ₂ O	26.78	203.0615
Nuarimol F3	C ₇ H ₄ ClO	26.78	138.9945
Nuarimol F4	C ₅ H ₃ N ₂ O	26.78	107.0240
o,p'-DDT	C ₁₄ H ₉ Cl ₅	25.04	351.9141
o,p'-DDT F1	C ₁₄ H ₉ Cl ₄	25.04	316.9453
o,p'-DDT F2	C ₁₄ H ₉ Cl ₃	25.04	281.9764
o,p'-DDT F3	C ₁₄ H ₉ Cl ₂	25.04	247.0076

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
o,p'-DDT F4	C13H9Cl2	25.04	235.0076
o,p'-DDT F5	C14H9Cl	25.04	212.0387
o,p'-DDT F6	C14H9	25.04	177.0699
o,p'-DDT F7	C13H9	25.04	165.0699
o,p'-DDT F8	C13H8Cl	25.04	199.0309
Ortophenylphenol	C12H10O	10.67	170.0726
Ortophenylphenol F1	C11H9	10.67	141.0699
Ortophenylphenol F2	C9H7	10.67	115.0542
p,p'-DDE	C14H8Cl4	23.42	315.9375
p,p'-DDE F1	C14H8Cl2	23.42	245.9998
p,p'-DDE F2	C14H8	23.42	176.0621
p,p'-DDT	C14H9Cl5	26.26	351.9141
p,p'-DDT F1	C14H9Cl4	26.26	316.9453
p,p'-DDT F2	C14H9Cl3	26.26	281.9764
p,p'-DDT F3	C14H9Cl2	26.26	247.0076
p,p'-DDT F4	C13H9Cl2	26.26	235.0076
p,p'-DDT F5	C14H9Cl	26.26	212.0387
p,p'-DDT F6	C14H9	26.26	177.0699
p,p'-DDT F7	C13H9	26.26	165.0699
p,p'-DDT F8	C13H8Cl	25.04	199.0309
Parathion Methyl	C8H10NO5PS	18.10	263.0012
Parathion Methyl F1	C2H6O3P	18.10	109.0049
Parathion Methyl F2	CH3O2P	18.10	77.9865
Parathion Methyl F3	C6H5NO2	18.10	123.0315
Parathion Methyl F4	C2H6O2PS	18.10	124.9821
Pebulate	C10H21NOS	9.61	203.1338
Pebulate F1	C7H15NOS	9.61	161.0869
Pebulate F2	C7H14NO	9.61	128.1070
Pebulate F3	C6H14N	9.61	100.1121
Pebulate F4	C3H6NO	9.61	72.0444
Penconazole	C13H15Cl2N3	21.23	283.0638
Penconazole F1	C13H15ClN3	21.23	248.0949
Penconazole F2	C11H11Cl2	21.23	213.0232
Penconazole F3	C7H5Cl2	21.23	158.9763
Permethrin I	C21H20Cl2O3	31.62	390.0784
Permethrin I F1	C13H11O	31.62	183.0804
Permethrin I F2	C7H9Cl2	31.62	163.0076
Permethrin II	C21H20Cl2O3	31.87	390.0784
Permethrin II F1	C13H11O	31.87	183.0804
Permethrin II F2	C7H9Cl2	31.87	163.0076
Phenothrin I	C23H26O3	29.04	350.1876
Phenothrin I F1	C13H11O	29.04	183.0804
Phenothrin I F2	C12H9O	29.04	169.0648
Phenothrin I F3	C9H15	29.04	123.1168
Phenothrin II	C23H26O3	29.25	350.1876
Phenothrin II F1	C13H11O	29.25	183.0804
Phenothrin II F2	C12H9O	29.25	169.0648
Phenothrin II F3	C9H15	29.25	123.1168
Phosmet	C11H12NO4PS2	27.98	316.9940



Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Phosmet F1	C9H6NO2	27.98	160.0393
Phosmet F2	C6H5	27.98	77.0386
Picolinafen	C19H12F4N2O2	28.30	376.0829
Picolinafen F1	C12H7F3NO	28.30	238.0474
Picolinafen F2	C8H5FN2O	28.30	164.0380
Picolinafen F3	C7H4F3	28.30	145.0260
Pirimicarb	C11H18N4O2	17.39	238.1424
Pirimicarb F1	C8H12N3O	17.39	166.0975
Pirimicarb F2	C3H6NO	17.39	72.0444
Pirimiphos Methyl	C11H20N3O3PS	19.31	305.0957
Pirimiphos Methyl F1	C10H17N3O3PS	19.31	290.0723
Pirimiphos Methyl F2	C9H15N3O3PS	19.31	276.0566
Pirimiphos Methyl F3	C8H13N3O3PS	19.31	262.0410
Pirimiphos Methyl F4	C7H10N2O3PS	19.31	233.0144
Procymidone	C13H11Cl2NO2	21.85	283.0161
Procymidone F1	C12H11Cl2NO	21.85	255.0212
Procymidone F2	C6H8O	21.85	96.0570
Procymidone F3	C6H3ClN	21.85	123.9949
Profenofos	C11H15BrClO3PS	23.32	371.9346
Profenofos F1	C11H15BrO3PS	23.32	336.9657
Profenofos F2	C6H4BrClO	23.32	205.9129
Profenofos F3	C9H14ClO3PS	23.32	268.0084
Profenofos F4	C8H8BrClO3P	23.32	296.9077
Profenofos F5	H2O2PS	23.32	96.9508
Prometon	C10H19N5O	15.16	225.1584
Prometon F1	C9H16N5O	15.16	210.1349
Prometon F2	C7H13N5O	15.16	183.1115
Prometon F3	C6H10N5O	15.16	168.0880
Prometryn	C10H19N5S	18.63	241.1356
Prometryn F1	C9H16N5S	18.63	226.1121
Prometryn F2	C7H13N5S	18.63	199.0886
Prometryn F3	C6H10N5S	18.63	184.0651
Propazine	C9H16ClN5	15.50	229.1089
Propazine F1	C8H13ClN5	15.50	214.0854
Propazine F2	C5H7ClN5	15.50	172.0384
Propoxur	C11H15NO3	12.58	209.1046
Propoxur F1	C9H12O2	12.58	152.0832
Propoxur F2	C6H4O	12.58	92.0257
Propoxur F3	C6H6O2	12.58	110.0362
Propoxur F4	C5H4	12.58	64.0303
Prosulfocarb	C14H21NOS	18.79	251.1338
Prosulfocarb F1	C7H14NOS	18.79	160.0791
Prosulfocarb F2	C7H14NO	18.79	128.1070
Prosulfocarb F3	C7H7	18.79	91.0542
Prosulfocarb F4	H2OPS2	18.79	112.9279
Prothiofos	C11H15Cl2O2PS2	23.20	343.9623
Prothiofos F1	C11H15ClO2PS2	23.20	308.9934
Prothiofos F2	C6H4Cl2O	23.20	161.9634
Prothiofos F3	C8H8Cl2O2PS	23.20	268.9354

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Pyrimethanil	C12H13N3	16.17	199.1104
Pyrimethanil F1	C11H10N3	16.17	184.0869
Pyrimethanil F2	C7H6N2	16.17	118.0525
Pyrimethanil F3	C10H9N2	16.17	157.0760
Pyriproxyfen	C20H19NO3	29.62	321.1359
Pyriproxyfen F1	C8H10NO	29.62	136.0757
Pyriproxyfen F2	C12H10O2	29.62	186.0675
Pyriproxyfen F3	C15H14O2	29.62	226.0988
Pyriproxyfen F4	C5H6NO	29.62	96.0444
Quinalphos	C12H15N2O3PS	21.61	298.0536
Quinalphos F1	C8H6N2O	21.61	146.0475
Quinalphos F2	C8H6N2	21.61	130.0525
Quinalphos F3	C7H11NO3	21.61	157.0733
Quinoxifen	C15H8Cl2FNO	26.06	306.9961
Quinoxifen F1	C15H8ClFNO	26.06	272.0273
Quinoxifen F2	C15H9FNO	26.06	238.0663
Secbumeton	C10H19N5O	16.62	225.1584
Secbumeton F1	C9H16N5O	16.62	210.1349
Secbumeton F2	C6H11N5O	16.62	169.0958
Secbumeton F3	C8H14N5O	16.62	196.1193
Tebuconazole	C16H22ClN3O	26.76	307.1446
Tebuconazole F1	C12H13ClN3O	26.76	250.0742
Tebuconazole F2	C7H6Cl	26.76	125.0153
Tebuconazole F3	C3H5N3	26.76	83.0478
Tebufenpyrad	C18H24ClN3O	28.64	333.1602
Tebufenpyrad F1	C17H21ClN3O	28.64	318.1368
Tebufenpyrad F2	C7H8ClN2O	28.64	171.0320
Tecnazene	C6HCl4NO2	12.43	258.8756
Tecnazene F1	C6HCl4	12.43	212.8827
Tecnazene F2	C5HCl4	12.43	200.8827
Terbumeton	C10H19N5O	15.54	225.1584
Terbumeton F1	C9H16N5O	15.54	210.1349
Terbumeton F2	C6H11N5O	15.54	169.0958
Terbumeton F3	C5H8N5O	15.54	154.0723
Terbutryn	C10H19N5S	19.10	241.1356
Terbutryn F1	C9H16N5S	19.10	226.1121
Terbutryn F2	C6H11N5S	19.10	185.0730
Terbutryn F3	C5H8N5S	19.10	170.0495
Tetraconazole	C13H11Cl2F4N3O	20.37	371.0210
Tetraconazole F1	C13H11ClF4N3O	20.37	336.0521
Tetraconazole F2	C11H10Cl2N3	20.37	254.0246
Tetraconazole F3	C8H5Cl2	20.37	170.9763
Tetraconazole F4	C7H5Cl2	20.37	158.9763
Tetradifon	C12H6Cl4O2S	29.04	353.8837
Tetradifon F1	C6H4Cl	29.04	110.9996
Tetradifon F2	C6H4ClOS	29.04	158.9666
Tetradifon F3	C6H2Cl3OS	29.04	226.8886
Tolclofos Methyl	C9H11Cl2O3PS	18.28	299.9538
Tolclofos Methyl F1	C8H8ClO3PS	18.28	264.9850

Compound	Molecular Formula	Retention Time (min)	Theoretical Mass
Tolclofos Methyl F2	C7H5Cl2O	18.28	174.9712
Tolclofos Methyl F3	C2H6O2PS	18.28	124.9821
Tolclofos Methyl F4	C8H8ClO3PS	18.28	249.9615
Tolyfluanide	C10H13Cl2FN2O	21.39	345.9774
Tolyfluanide F1	C8H7Cl2FNS	21.39	237.9655
Tolyfluanide F2	C7H7NS	21.39	137.0294
Tolyfluanide F3	C7H8N	21.39	106.0651
Tolyfluanide F4	C9H13N2S	21.39	181.0794
TPP	C18H15O4P	27.05	326.0702
TPP F1	C12H10O3P	27.05	233.0362
TPP F2	C12H9O	27.05	169.0648
TPP F3	C12H8O2P	27.05	215.0256
Triadimefon	C14H16ClN3O2	20.12	293.0926
Triadimefon F1	C9H7ClN3O	20.12	208.0272
Triadimefon F2	C8H6ClN2O	20.12	181.0163
Triadimefon F3	C6H5ClO	20.12	128.0023
Trifluralin	C13H16F3N3O4	13.95	335.1087
Trifluralin F1	C11H11F3N3O4	13.95	306.0696
Trifluralin F2	C13H5F3NO2	13.95	264.0267
Trifluralin F3	C8H5F3N3O3	13.95	248.0278
Vinclozolin	C12H9Cl2NO3	18.13	284.9954
Vinclozolin F1	C11H9Cl2NO	18.13	241.0056
Vinclozolin F2	C7H3Cl2NO	18.13	186.9586
Vinclozolin F3	C6H6NO2	18.13	124.0393
Vinclozolin F4	C10H9ClN	18.13	178.0418

F1, F2, F3, F4, are the characteristics fragment ions obtained for each pesticide under electronic ionization.