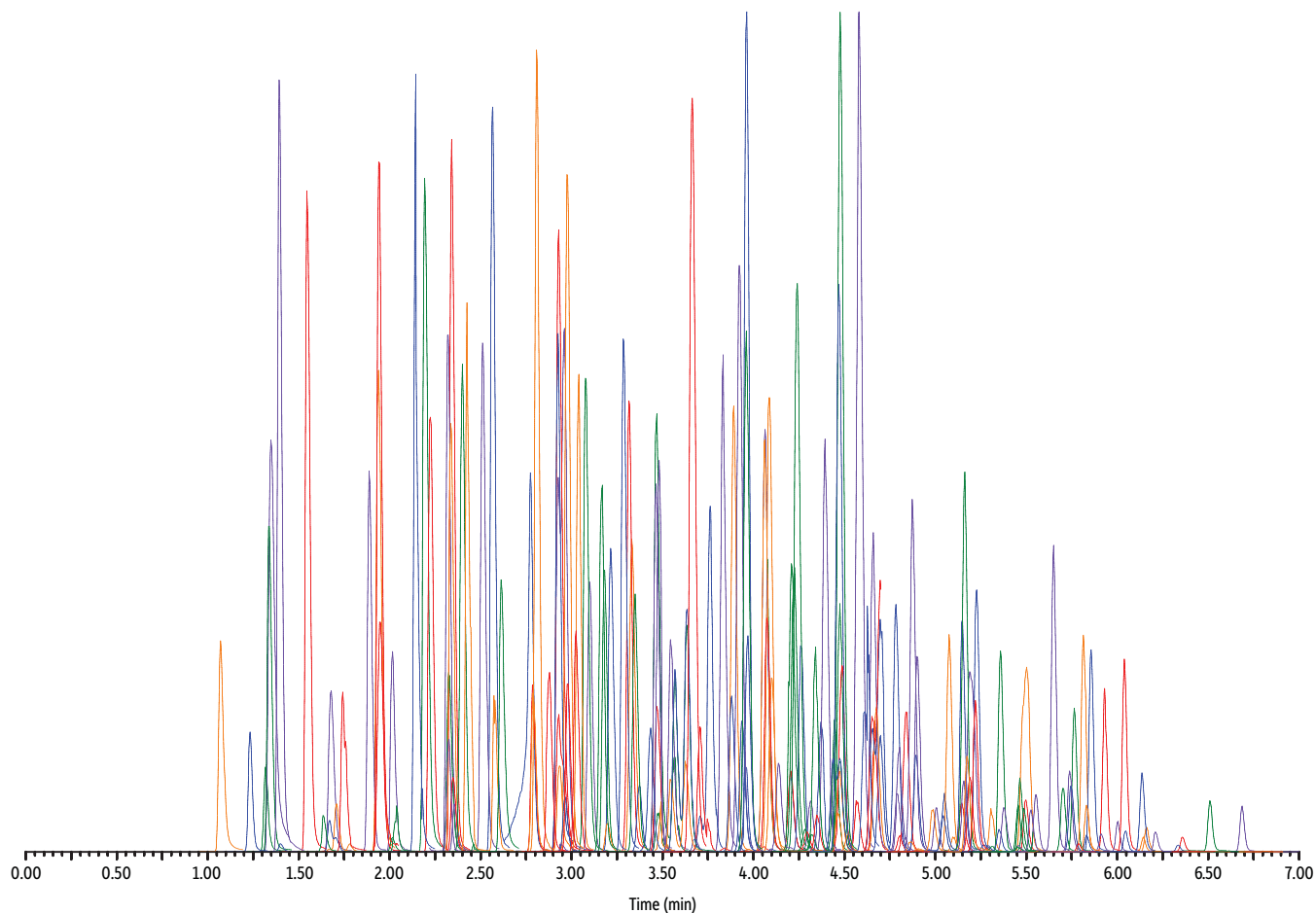


## LC Multi-Residue Pesticide Standard Kit on Raptor™ ARC-18 by LC-MS/MS

Peaks	tR (min)	Precursor Ion	Product Ion 1	Product Ion 2	Peaks	tR (min)	Precursor Ion	Product Ion 1	Product Ion 2	Peaks	tR (min)	Precursor Ion	Product Ion 1	Product Ion 2
1. Cyromazine	1.07	167.0	85.0	108.1	73. Diuron	3.47	233.0	72.1	46.3	145. Neburon	4.80	275.0	88.0	57.0
2. Methamidophos	1.23	142.0	93.9	124.9	74. Forchlorfenuron	3.47	248.1	129.0	93.0	146. Rotenone	4.84	395.0	213.1	192.1
3. Formetanate HCl	1.32	222.0	165.0	46.0	75. Isocarbophos	3.48	291.1	121.1	231.1	147. Tebufenozide	4.87	353.1	133.0	297.1
4. Aminocarb	1.34	209.0	137.0	152.0	76. Isoproturon	3.48	207.0	72.0	47.0	148. Dimoxystrobin	4.88	327.1	116.1	205.2
5. Pymetrozine	1.35	218.0	105.0	79.0	77. Pyrimethanil	3.48	200.0	107.0	82.0	149. Bromuconazole isomer 2	4.89	376.0	158.9	70.1
6. Acephate	1.40	184.1	143.0	125.1	78. Desmedipham	3.55	318.0	182.0	154.0	150. Flubendiamide	4.89	683.0	408.0	274.0
7. Propamocarb	1.40	189.1	102.0	144.0	79. Metalaxyl	3.56	280.1	220.1	192.1	151. Carfentrazone ethyl	4.90	412.0	346.0	266.0
8. Omethoate	1.55	214.1	125.1	183.1	80. Spiroxamine isomer 1	3.57	298.0	144.0	100.0	152. Diclobutrazol	4.91	328.0	70.0	59.1
9. Aldicarb sulfoxide	1.64	207.0	89.0	132.0	81. Phenmedipham	3.63	301.0	168.0	136.0	153. Kresoxim-methyl	4.92	314.1	206.0	116.0
10. Dinotefuran	1.64	203.0	129.0	157.0	82. Spiroxamine isomer 2	3.63	298.0	144.0	100.0	154. Tebuconazole	4.98	308.0	70.1	125.0
11. Butoxycarboxim	1.67	223.0	106.0	166.0	83. Chlorantraniliprole	3.66	483.9	286.0	453.0	155. Penconazole	5.00	284.0	70.1	159.0
12. Nitenpyram	1.68	271.1	125.9	224.9	84. Cycluron	3.68	199.0	89.1	69.2	156. Spinosyn A	5.04	732.6	142.0	98.1
13. Aldicarb sulfone	1.71	240.0	148.0	86.0	85. Prometryn	3.71	242.0	158.0	200.1	157. Prothioconazole	5.05	344.0	326.0	189.0
14. Carbendazim	1.74	192.1	160.1	132.1	86. Terbutryn	3.76	242.1	186.1	91.0	158. Alanycarb	5.06	400.0	238.2	254.1
15. Oxamyl	1.78	237.0	72.0	90.0	87. Linuron	3.83	249.1	160.0	182.0	159. Zoxamide	5.08	336.0	187.1	159.0
16. Flonicamid	1.89	230.0	203.1	174.1	88. Fenobucarb	3.84	208.0	94.9	152.0	160. Famoxadone	5.10	392.2	331.1	238.0
17. Methomyl	1.91	163.0	106.0	88.0	89. Diethofencarb	3.88	268.0	226.0	124.0	161. Prochloraz	5.15	376.0	308.0	70.1
18. Thiabendazole	1.94	202.0	175.0	131.0	90. Ethofumesate	3.89	287.1	121.1	259.1	162. Triflumuron	5.15	359.0	156.1	139.1
19. Thiamethoxam	1.94	292.0	211.0	181.0	91. Azoxystrobin	3.92	404.1	372.0	329.0	163. Benalaxyl	5.16	326.1	148.0	91.0
20. Mexacarbate	1.95	222.9	151.1	166.1	92. Ethirprole	3.94	396.9	350.9	255.2	164. Hexaconazole	5.16	314.0	70.1	159.0
21. Monocrotophos	2.02	224.1	127.1	98.1	93. Fenamidone	3.96	312.1	236.1	92.0	165. Hydramethylon	5.17	495.1	323.2	151.1
22. Fuberidazole	2.04	185.0	157.0	156.0	94. Methiocarb	3.96	226.0	121.0	169.0	166. Metconazole	5.19	320.1	70.0	125.0
23. Dicrotophos	2.14	238.0	112.0	193.0	95. Siduron	3.96	233.0	93.8	137.0	167. Propiconazole isomer 1 & 2	5.19	342.0	159.0	69.0
24. Imidacloprid	2.19	256.1	175.1	209.1	96. Fludioxonil	3.97	249.1	229.1	158.1	168. Clofentezine	5.22	303.0	138.0	102.0
25. Clothianidin	2.22	250.0	169.0	132.0	97. Furalaxyl	3.97	302.1	270.1	242.2	169. Pyraclostrobin	5.23	388.1	163.0	193.9
26. Trichlorfon	2.32	257.0	109.0	79.0	98. Halofenozide	3.99	331.1	104.9	275.0	170. Bitertanol	5.27	338.1	269.2	70.1
27. 3-Hydroxycarbofuran	2.33	238.0	181.0	163.0	99. Acibenzolar-S-methyl	4.06	210.9	91.0	135.9	171. Benzoiximate	5.29	364.0	199.1	105.0
28. Fenuron	2.33	165.0	71.9	45.9	100. Boscaldil	4.06	342.9	307.0	139.9	172. Spinosyn D	5.31	746.5	142.0	98.1
29. Dimethoate	2.34	230.1	125.0	199.0	101. Dimethomorph isomer 1	4.06	388.1	300.9	165.0	173. Thiobencarb	5.31	257.9	125.1	100.1
30. Vamidothion	2.34	288.0	146.0	118.0	102. Nuairimol	4.08	315.0	252.0	81.1	174. Diniconazole	5.35	326.1	70.2	159.0
31. Dioxacarb	2.35	224.1	123.1	167.1	103. Mandipropamid	4.09	412.3	328.2	356.2	175. Pencycuron	5.36	329.1	125.0	218.0
32. Mevinphos isomer 1	2.36	225.1	127.1	193.1	104. Flutolanil	4.10	324.1	262.1	65.0	176. Spinetoram	5.38	748.5	142.2	98.1
33. Acetamiprid	2.40	223.0	126.0	56.1	105. Promecarb	4.10	208.1	151.0	109.0	177. Hexaflumuron	5.46	461.0	158.0	141.0
34. Ethirimol	2.43	210.1	140.0	98.0	106. Paclobutrazol	4.14	294.1	125.1	70.2	178. Indoxacarb	5.46	528.0	203.0	218.0
35. Cymoxanil	2.46	199.0	128.0	111.0	107. Thiofanox	4.19	219.1	172.9	129.0	179. Iaconazole isomer 1	5.46	334.2	70.0	125.1
36. Pirimicarb	2.51	239.1	72.0	182.1	108. Cyproconazole isomer 1	4.21	292.2	125.1	70.2	180. Triflumizole	5.49	346.0	277.9	60.0
37. Thiachloprid	2.56	253.0	126.0	90.1	109. Mepromil	4.21	270.1	119.0	91.0	181. Difenoconazole isomer 1 & 2	5.50	406.0	251.1	111.1
38. Mevinphos isomer 2	2.58	225.1	127.1	193.1	110. Bupirimate	4.22	317.0	166.0	108.0	182. Trifloxystrobin	5.50	409.0	186.0	145.0
39. Mesotrione	2.62	340.1	228.1	104.0	111. Dimethomorph isomer 2	4.24	388.1	300.9	165.0	183. Novaluron	5.53	493.0	158.0	141.0
40. Butocarbaxim	2.68	213.0	156.0	116.0	112. Myclobutanil	4.26	289.1	70.2	125.1	184. Iaconazole isomer 2	5.56	334.2	70.0	125.1
41. Aldicarb	2.71	213.1	89.1	116.1	113. Clethodim isomer 1	4.28	360.0	164.0	268.1	185. Emamectin benzoate B1b	5.57	872.4	158.2	126.1
42. Oxadixyl	2.77	279.0	219.0	132.0	114. Methoxyfenozide	4.30	369.1	149.1	313.2	186. Clethodim isomer 2	5.65	360.0	164.0	268.1
43. Carbetamide	2.79	237.0	118.0	192.0	115. Chloroxuron	4.31	291.1	164.1	111.0	187. Buprofezin	5.70	306.1	201.0	57.4
44. Tricyclazole	2.79	190.0	163.0	136.0	116. Cyprodinil	4.32	226.0	93.0	108.0	188. Teflubenzuron	5.74	380.9	158.0	140.9
45. Simetryn	2.81	214.0	124.0	95.9	117. Triadimefon	4.34	294.1	197.2	69.3	189. Emamectin benzoate B1a	5.75	886.5	158.1	126.1
46. Thiophanate-methyl	2.88	343.0	151.0	93.0	118. Bifenazate	4.35	301.1	198.0	170.0	190. Benfuracarb	5.76	411.1	195.0	190.0
47. Bendiocarb	2.93	224.1	109.0	167.0	119. Triadimenol	4.35	296.1	99.1	70.2	191. Fluzinam	5.78	464.8	373.0	338.1
48. Prometon	2.93	226.0	184.3	86.3	120. Cyproconazole isomer 2	4.38	292.2	125.1	70.2	192. Metaflumizone	5.79	507.0	287.2	267.1
49. Secbumeton	2.93	226.2	100.2	170.2	121. Mefenacet	4.39	299.0	148.0	120.0	193. Furathiocarb	5.82	383.2	194.9	252.0
50. Thiazuron	2.93	221.0	101.9	93.9	122. Mepanipyrim	4.40	224.1	106.0	77.0	194. Lufenuron	5.83	511.2	158.0	141.0
51. Propoxur	2.95	210.0	111.0	168.0	123. Iprovalicarb isomer 1	4.44	321.1	119.1	203.1	195. Temephos	5.83	467.1	125.0	418.9
52. Metribuzin	2.96	215.0	131.0	89.0	124. Fluquinconazole	4.45	376.0	348.8	306.9	196. Tebufenpyrad	5.86	334.0	117.0	145.0
53. Terbumeton	2.96	226.1	114.1	170.1	125. Fenhexamid	4.46	302.1	97.2	55.3	197. pyriproxifen	5.91	322.1	96.0	227.1
54. Carbofuran	2.98	222.1	123.0	165.1	126. Bromuconazole isomer 1	4.47	376.0	158.9	70.1	198. Piperonyl butoxide	5.93	356.3	176.9	119.0
55. Imazalil	2.98	297.0	159.0	69.0	127. Fluxastrobin	4.47	459.0	427.0	188.0	199. Hexythiazox	6.01	353.0	228.1	168.1
56. Sulfentrazone	3.03	387.0	307.0	145.8	128. Iprovalicarb isomer 2	4.47	321.1	119.1	203.1	200. Quinoxifen	6.04	308.0	197.0	161.9
57. Pyracarbolid	3.04	218.1	125.1	97.1	129. Butafenacil	4.48	492.0	180.0	331.0	201. Flufenoxuron	6.05	489.1	158.0	141.0
58. Tebutiuron	3.08	229.0	172.0	116.0	130. Tetraconazole	4.48	372.0	159.0	70.1	202. Amitraz	6.14	294.0	163.0	122.0
59. Carbaryl	3.09	202.0	145.0	127.0	131. Flufenacet	4.49	364.0	152.1	194.1	203. Propargite	6.14	368.2	175.0	231.1
60. Carboxin	3.10	236.0	143.0	87.0	132. Triticonazole	4.52	318.1	70.1	124.9	204. Etoxazole	6.16	360.2	304.2	177.2
61. Monolinuron	3.17	215.0	126.0	99.0	133. Cyazofamid	4.57	325.0	107.9	261.0	205. Spiromesifen	6.20	371.1	273.1	255.1
62. Fluometuron	3.18	233.2	72.2	46.4	134. Spirotetramat	4.58	374.2	330.3	302.2	206. Chlorfluazuron	6.21	539.8	382.9	158.0
63. Ethiofencarb	3.20	226.1	107.0	164.0	135. Diflubenzuron	4.63	311.1	141.0	158.1	207. Spirodiclofen	6.33	411.1	313.0	71.2
64. Ametryn	3.21	228.1	186.1	68.1	136. Epoxiconazole	4.66	330.0	121.0	101.0	208. Fenpyroximate	6.36	422.2	366.1	138.1
65. Chlortoluron	3.29	213.0	72.0	46.0	137. Etaconazole isomer 1	4.66	328.1	205.0	159.0	209. Abamectin B1b	6.48	876.6	553.4	291.0
66. Metobromuron	3.32	259.1	170.0	148.1	138. Fenbuconazole	4.67	337.0	125.0	70.1	210. Pyridaben	6.51	365.1	147.1	309.1
67. Methoprotryne	3.33	272.2	170.2	198.2	139. Fenarimol	4.68	331.0	268.0	81.0	211. Eprinomectin	6.53	914.6	186.0	154.0
68. Propham	3.33	180.0	138.0	120.1	140. Etaconazole isomer 2	4.70	328.1	205.0	159.0	212. Abamectin B1a	6.61	890.5	305.2	567.3
69. Flutriafol	3.35	302.1	123.1	70.2	141. Fipronil	4.70	437.0	367.9	290.0	213. Fenaziquin	6.69	307.2	161.0	57.2
70. Isoprocarb	3.37	194.1	95.1	137.1	142. Flusilazole	4.78	316.0	247.0	165.0	214. Doramectin	6.82	916.6	331.2	593.4
71. Fenpropimorph	3.44	304.2	147.1	57.2	143. Picoxystrobin	4.79	368.0	145.1	205.1	215. Moxidectin	6.82	640.5	498.3	528.4
72. Methabenzthiazuron	3.46	222.0	165.0	150.0	144. Fenoxycarb	4.80	302.1	116.1	88.0	216. Ivermectin	7.01	892.6	569.4	551.4

# LC Multi-Residue Pesticide Standard Kit on Raptor™ ARC-18 by LC-MS/MS



LC\_FF0541

**Column** Raptor™ ARC-18 (cat.# 9314A12)  
**Dimensions:** 100 mm x 2.1 mm ID  
**Particle Size:** 2.7 µm  
**Temp.:** 50 °C  
**Sample** LC multi-residue pesticide kit (cat.# 31971)  
**Diluent:** Water  
**Conc.:** 20 ng/mL  
**Inj. Vol.:** 5 µL  
**Mobile Phase**  
**A:** Water + 2 mM ammonium formate + 0.2% formic acid  
**B:** Methanol + 2 mM ammonium formate + 0.2% formic acid

**Max Pressure:** 525 bar  
**Detector** Waters Xevo TQ-S  
**Ion Source:** Waters Zspray™ ESI  
**Ion Mode:** ESI+  
**Mode:** MRM  
**Instrument** Waters ACQUITY UPLC® I-Class  
**Notes** When combining a large number of compounds with different chemical functionalities, mix stability can be an issue. In formulating our LC multiresidue pesticide standard kit (cat.# 31971), we extensively studied the 204 compounds involved, then grouped them into as few mixes as possible while still ensuring maximum long-term stability and reliability. Several of these compounds are isomeric and separation of the isomers accounts for 216 peaks in the chromatogram compound list. For quantitative analysis, we recommend analyzing each mix separately to ensure accurate results for every compound.

Time (min)	Flow (mL/min)	%A	%B
0.00	0.4	95	5
2.00	0.4	40	60
4.00	0.4	25	75
6.00	0.4	0	100
7.00	0.4	0	100
7.01	0.4	95	5
9.50	0.4	95	5