



Carbamate Pesticides on Ultra II® Carbamate (LC/MS/MS)

Peaks	RT (min.)	Transition 1	Transition 2
1. Aldicarb sulfone	1.9	223.1 → 86.1	223.1 → 148.0
2. Aldicarb sulfoxide	2.2	207.1 → 132.1	207.1 → 89.1
3. Oxamyl	2.4	237.1 → 72.1	237.1 → 90.1
4. Methomyl	2.6	163.1 → 88.1	163.1 → 106.0
5. 3-Hydroxycarbofuran	3.5	238.1 → 163.1	238.1 → 181.2
6. Aldicarb	4.5	208.1 → 116.0	208.1 → 88.9
7. Propoxur	5.1	210.1 → 111.0	210.1 → 168.1
8. Carbofuran	5.3	222.1 → 165.2	222.1 → 123.0
9. Carbaryl	5.8	202.1 → 145.1	202.1 → 127.1
10. Methiocarb	7.0	226.1 → 169.2	226.1 → 121.0

Column Ultra II® Carbamate (cat.# 9611312)
 Dimensions: 100 mm x 2.1 mm ID
 Particle Size: 3 µm
 Pore Size: 100 Å
 Temp.: 35 °C

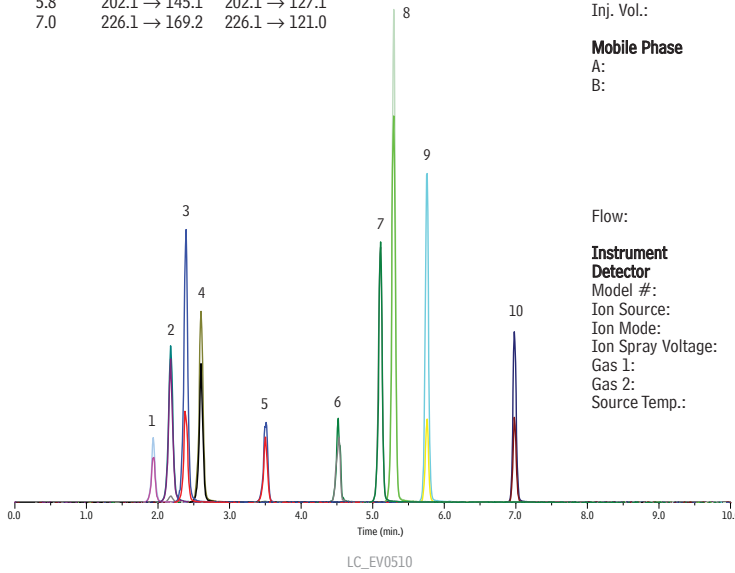
Sample 531.1 Carbamate Pesticide Calibration Mixture (cat.# 32273)
 Diluent: acetonitrile
 Conc.: 100 ppb each pesticide
 Inj. Vol.: 5 µL

Mobile Phase
 A: 10 mM NH₄OAc in water
 B: 10 mM NH₄OAc in methanol

Time (min.)	%B
0	10
1	10
8	90
10	90
11	90
11	10

Flow: 0.5 mL/min.

Instrument Applied Biosystems/MDS Sciex LC/MS/MS System
Detector Applied Biosystems/MDS Sciex LC/MS/MS
 Model #: 4000 QTRAP™ LC/MS/MS system
 Ion Source: TurboIonSpray®
 Ion Mode: ESI+
 Ion Spray Voltage: 5 kV
 Gas 1: 40 psi (275.8 kPa)
 Gas 2: 60 psi (413.7 kPa)
 Source Temp.: 500 °C



Carbamates in Orange Oil on Ultra Carbamate (LC-TOFMS)

Peak List:

- aldicarb sulfone
- aldicarb sulfoxide
- oxamyl
- methomyl
- 3-hydroxycarbofuran
- aldicarb
- propoxur
- carbofuran
- carbaryl
- methiocarb
- BDMC (IS)

Sample: 531.1 Carbamate Pesticide Calibration Mix (cat.# 32273) and Internal Standard 4-bromo-3,5-dimethylphenyl-N-methylcarbamate (cat.# 32274) 50:50 spiked into unprocessed orange oil at 10ppm
 Inj.: 3µL
 Conc.: 10ppm
 Sample diluent: methanol
 Matrix: orange oil

Column: Ultra Carbamate
 Cat. #: 9177352
 Dimensions: 50mm x 2.1mm
 Particle size: 3µm
 Pore size: 100Å

Conditions:
 Mobile phase: A: 2mM ammonium acetate:methanol, 90:10
 B: 2mM ammonium acetate:methanol, 10:90

Time (min.)	%B
0	20
20	100
25	100

Flow: 200µL/min.
 Temp.: ambient
 Det.: LECO Unique® LC-TOFMS
 Interface: ESI
 Ion mode: Positive
 Temp.: 130°C
 Nebulizer pressure: 100kPa
 Desolvation gas (N₂): 4,000cc/min.
 Interface temperature: 120°C
 Nozzle: (+) 62V
 Capillary: (+) 2.75kV

