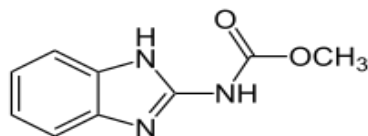
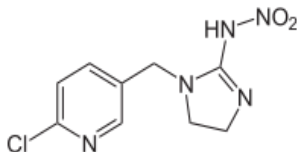


QuEChERS LRC Cartridge

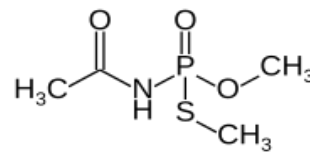
Compounds :



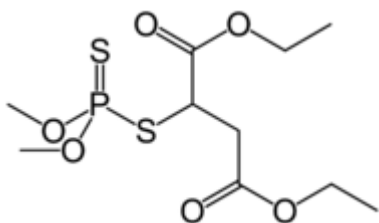
Carbendazim



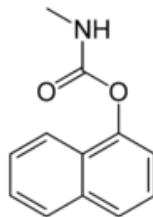
Imidacloprid



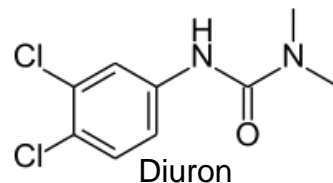
Acephate



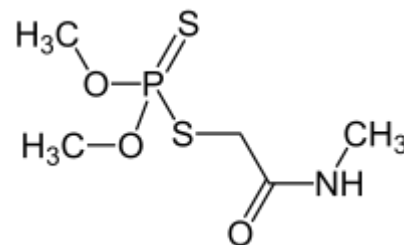
Malathion



Carbaryl



Diuron



Dimethoate

QuEChERS EXTRACTION METHOD:

Pre-treatment:

Mix 0.5 ml of juice with 1 mL of acetonitrile with 1% acetic acid. Vortex for about 1 minutes, then centrifuge it.



Condition:

Add 1 mL of acetonitrile to QuEChERS-sugar cartridge. Place pressure to let it thru.



Add supernatant to the cartridge. Place pressure or vacuum, let it flow thru drop by drop. Collect it.



Add 1 ml of DCM/MeOH(4:1) to the cartridge. Place pressure or vacuum, let it flow thru drop by drop. Collect it. Repeat it one more time.



Evaporate it, and reconstitute with 30% acetonitrile with water

HPLC METHOD:

Column: Orochem Prestige C18 HPLC column 4.6x 250 mm, 5 µm.

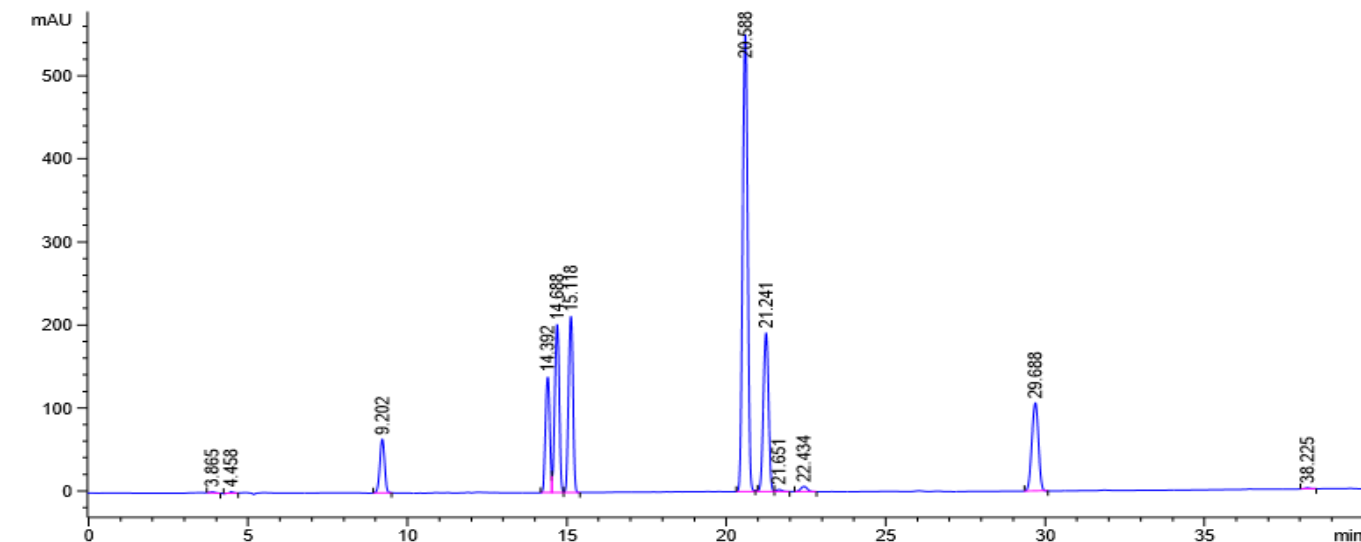
Part number:
Mobile phase: A: water
B: acetonitrile

Gradient: Initial 5% B for 2 min, then gradient to 20% B at 5 min, to 75% B at 30 min, to 95% B at 35 min, and hold 5 min.

Flow rate: 1.0 mL/min

Injection volume: 20 µL

UV wavelength: 220 nm



Pesticide	Retention time (minutes)	Pesticide	Retention time (minutes)
acephate	9.202	carbaryl	20.588
carbendazim	14.392	diuron	21.241
imidacloprid	14.688	malathion	29.688
dimethoate	15.118		

RESULTS:

Pesticide	Average Total Recovery (%)
Acephate	95
carbendazim	56
Imidacloprid	86
dimethoate	93
carbaryl	83
diuron	81
malathion	91