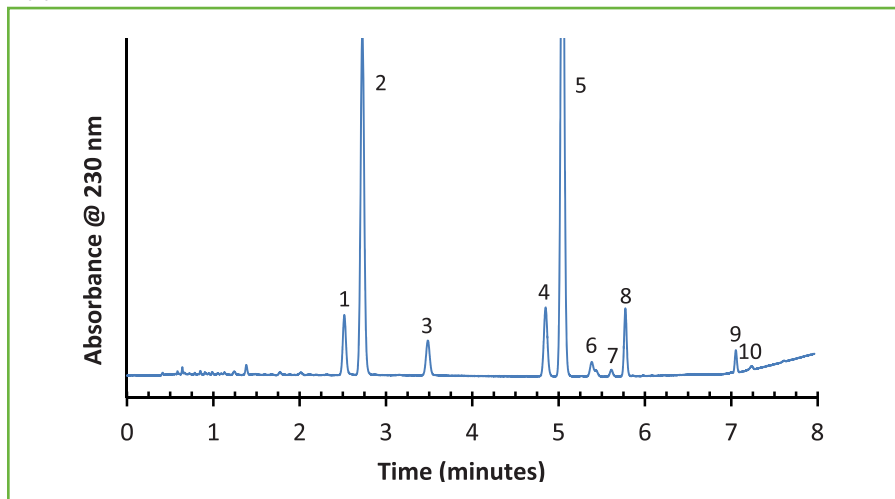




## Separation of Six Pyrethrins on HALO® AQ-C18, 2.7 μm

Application Note 164-PS



### PEAK IDENTITIES:

1. Cinerin II
2. Pyrethrin II
3. Jasmolin II
4. Cinerin I
5. Pyrethrin I
6. Unknown
7. Unknown
8. Jasmolin I
9. Unknown
10. Unknown

Pyrethrins are insecticides derived from chrysanthemum flowers. The extracted chemicals can paralyze the nervous systems of insects and lead to death. These naturally occurring pyrethrin isomers can be separated rapidly with good resolution using a HALO® AQ-C18 column.

### TEST CONDITIONS:

**Column:** HALO 90 Å AQ-C18, 2.7 μm,  
3.0 x 100 mm

**Part Number:** 92813-622

#### Mobile Phase:

A: 0.02 M sodium phosphate buffer, pH 3.0

B: Acetonitrile

Gradient:	Time (min)	% B
	0.0	65
	2.5	65
	5.0	75
	6.0	90
	8.0	90

**Flow Rate:** 2.2 mL/min

**Pressure:** 245 bar

**Temperature:** 30 °C

**Detection:** UV 230 nm, VWD

**Injection Volume:** 4.0 μL

**Sample Solvent:** Acetonitrile

**Response Time:** 0.02 sec

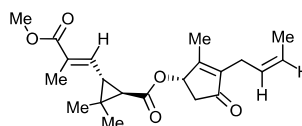
**Flow Cell:** 2.5 μL semi-micro

**Data Rate:** 25 Hz

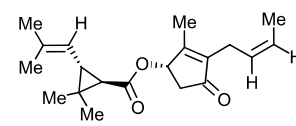
**LC System:** Shimadzu Prominence UFLC XR

**Extra Column Volume:** ~14 μL

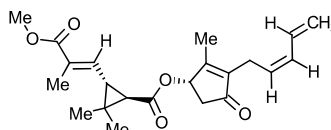
### STRUCTURES:



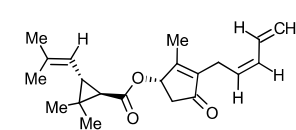
Cinerin II



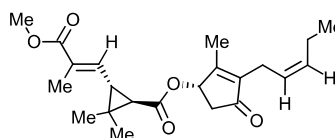
Cinerin I



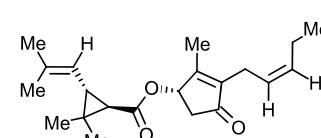
Pyrethrin II



Pyrethrin I



Jasmolin II



Jasmolin I

