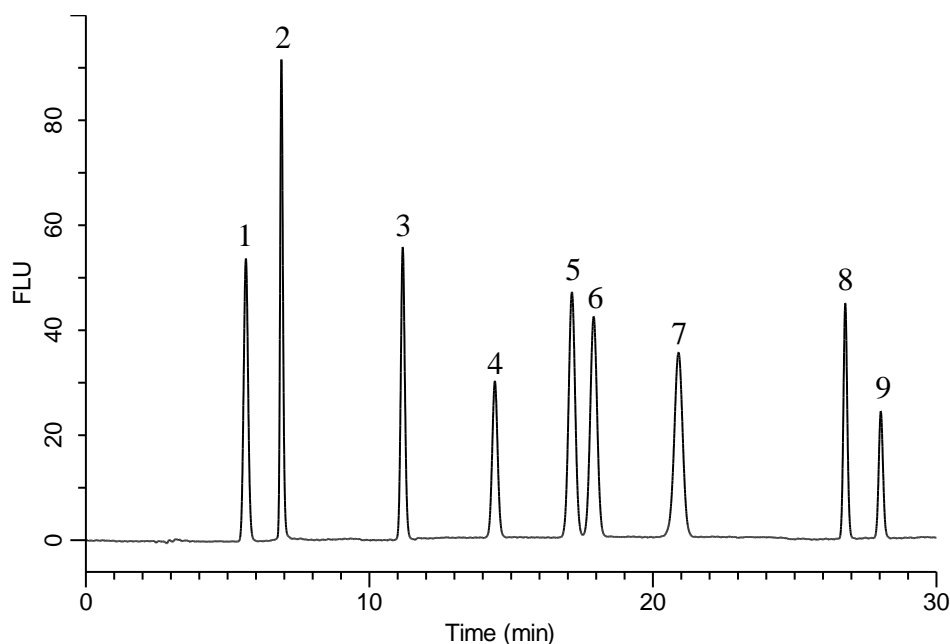


## Analysis of Carbamate insecticides – Inertsil ODS-4 (Directed by Post-Column Method with OPA)



### Conditions

**System** : GL-7400 HPLC system  
**Column** : Inertsil ODS-4 (5 $\mu$ m, 250 x 4.6 mm I.D.)  
**Column Cat. No.** : 5020-03946  
**Eluent** : A) CH<sub>3</sub>OH  
           B) H<sub>2</sub>O  
           A/B = 35/65 – 2 min – 35/65 – 0.1 min – 53/47  
           - 18.4 min – 53/47 – 0.1 min – 70/30 – 9.4 min  
           - 70/30 – 0.1 min – 35/65 – 9.9 min – 35/65, v/v

**Flow rate** : 1.0 mL/min

**Reaction Reagent** : OPA reagent\*

**Col. Temp.** : 40 °C

**Detection** : FL Ex 339 nm Em 455 nm  
(GL-7453A FL Detector)

**Injection Vol.** : 10  $\mu$ L

**Sample** : Pesticides

### Analyte:

|                 |          |
|-----------------|----------|
| 1. Oxamyl       | 1.0 mg/L |
| 2. Methomyl     | 1.0 mg/L |
| 3. Aldicarb     | 1.0 mg/L |
| 4. Bendiocarb   | 1.0 mg/L |
| 5. Carbaryl     | 1.0 mg/L |
| 6. Ethiofencarb | 1.0 mg/L |
| 7. Isoprocarb   | 1.0 mg/L |
| 8. Fenobucarb   | 1.0 mg/L |
| 9. Methiocarb   | 1.0 mg/L |

\* Dissolve 0.2 g of o-Phthalaldehyde in 2.5 mL of methanol, and add 0.05 mol/L sodium tetraborate aqueous solution to make 250 mL. After sonicating this solution, add 0.5 mL of 2-Mercaptoethanol.