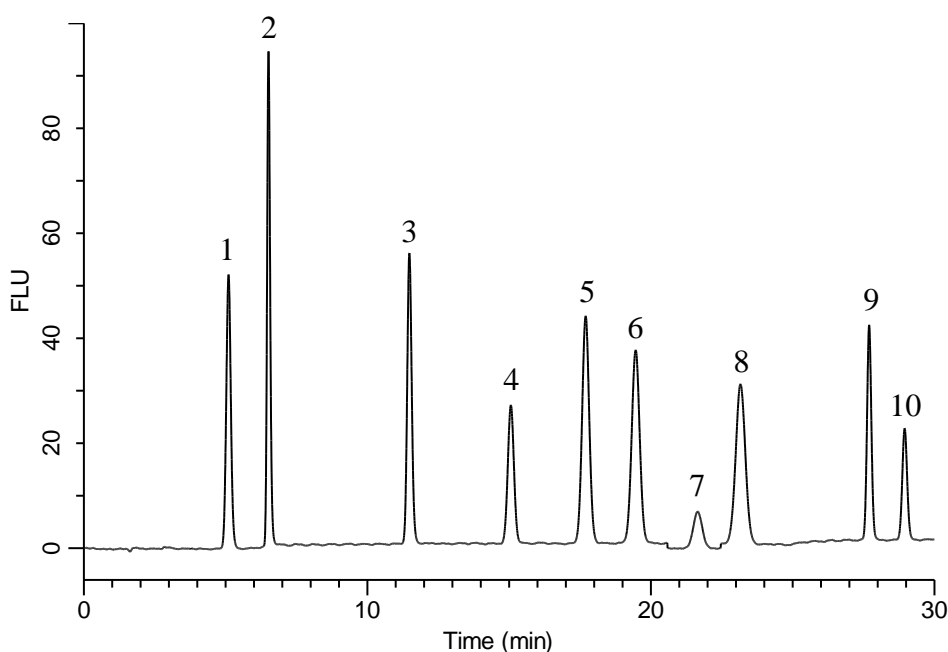


Analysis of Carbamate insecticides – Inertsil ODS-3 (Directed by Post-Column Method with OPA)



Conditions

System : GL-7400 HPLC system
Column : Inertsil ODS-3 (5 μ m, 250 x 4.6 mm I.D.)
Column Cat. No. : 5020-01732
Eluent : A) CH₃OH
 B) H₂O
 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 (0 min)
 Ex 312 nm Em 382 nm (20.5 min)
 Ex 339 nm Em 455 nm (22.3 min)
 (GL-7453A FL Detector)

Injection Vol. : 10 μ 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. Pirimicarb	1.0 mg/L
8. Isoprocarb	1.0 mg/L
9. Fenobucarb	1.0 mg/L
10. 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.