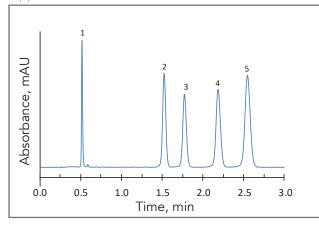


INDUSTRIAL



Separation of Iodonium Salts on HALO® Phenyl-Hexyl

Application Note 126-IP



PEAK IDENTITIES:

- 1. Diphenyliodonium chloride
- 2. (4-Nitrophenyl)(2,4,6-Trimethylphenyl) lodonium triflate
- 3. (3-Bromophenyl)(2,4,6-Trimethylphenyl) lodonium triflate
- 4. Bis(2,4,6-Trimethylphenyl) Iodonium Triflate
- 5. (4-Iodophenyl)(2,4,6-Trimethylphenyl) Iodonium Triflate

lodonium salts have gained favor as reagents for organic synthesis. They can be rapidly analyzed by HPLC using a HALO® Fused-Core® Phenyl-Hexyl column in an ion pairing separation mode.

TEST CONDITIONS:

Column: HALO 90 Å Phenyl-Hexyl, 2.7 µm,

4.6 x 50 mm

Part Number: 92814-405 **Mobile Phase:** 30/70 - A/B

A: Water

B: Methanol with 50 mM sodium

heptane sulfonate

Flow Rate: 1.8 mL/min Pressure: 276 bar

Temperature: 30 $^{\circ}$ C

Detection: UV 254 nm, VWD **Injection Volume:** 2.0 μL

Sample Solvent: Mobile phase **Response Time:** 0.02 sec

Response Time: 0

Data Rate: 25 Hz

Flow Cell: 2.5 µL semi-micro

LC System: Shimadzu Prominence UFLC XR

Extra Column Volume: ~14 µL

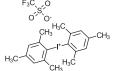
STRUCTURES:

Diphenyliodonium Chloride

(4-Nitrophenyl)(2,4,6-Trimethylphenyl)

Iodonium Triflate

(3-Bromophenyl)(2,4,6-Trimethylphenyl) Iodonium Triflate



Bis(2,4,6-Trimethylphenyl) lodonium Triflate

(4-lodophenyl)(2,4,6-Trimethylphenyl) lodonium Triflate