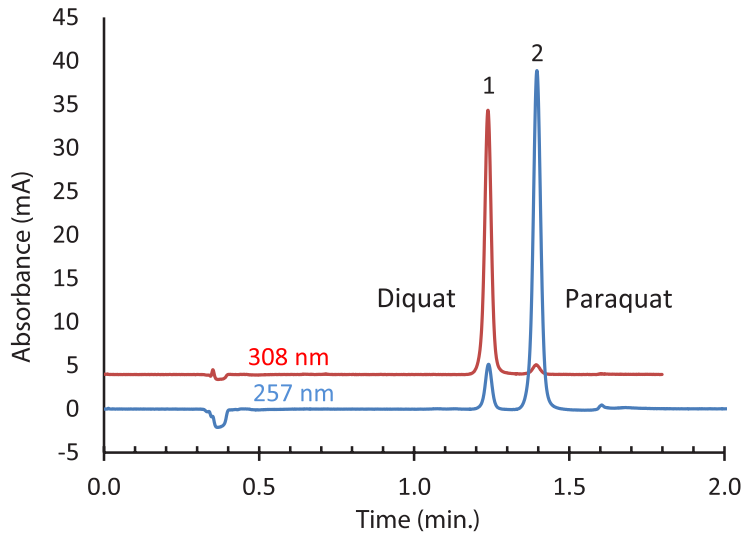
HALO®

ENVIRONMENTAL

Separation of Nonselective Herbicides on HALO® Phenyl-Hexyl, 5 µm

Application Note 131-P



PEAK IDENTITIES:

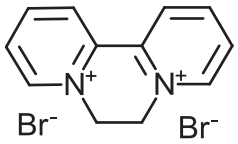
1. Diquat dibromide
2. Paraquat dichloride

The herbicides paraquat and diquat may be separated rapidly in under 2 minutes using a HALO® 5 µm Phenyl-Hexyl HPLC column. Large injection volumes are required to achieve the desired sensitivity. The separation conditions are based on the EPA method 549.2.

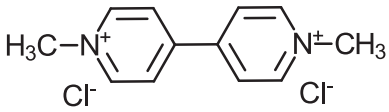
TEST CONDITIONS:

Column: HALO 90 Å Phenyl-Hexyl, 5 µm
3.0 x 100 mm
Part Number: 95813-606
Mobile Phase: 13.5 mL orthophosphoric acid, 10.3 mL diethylamine and 3.0 g of hexane-sulfonic acid, sodium salt in 1 L of water
Flow Rate: 1.0 mL/min
Pressure: 156 bar
Temperature: 30 °C
Detection: UV 257, 308 nm, VWD
Injection Volume: 40 µL
Sample Solvent: Water
Response Time: 0.02 sec
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
Extra Column Volume: ~14 µL

STRUCTURES:



Diquat Dibromide



Paraquat Dichloride