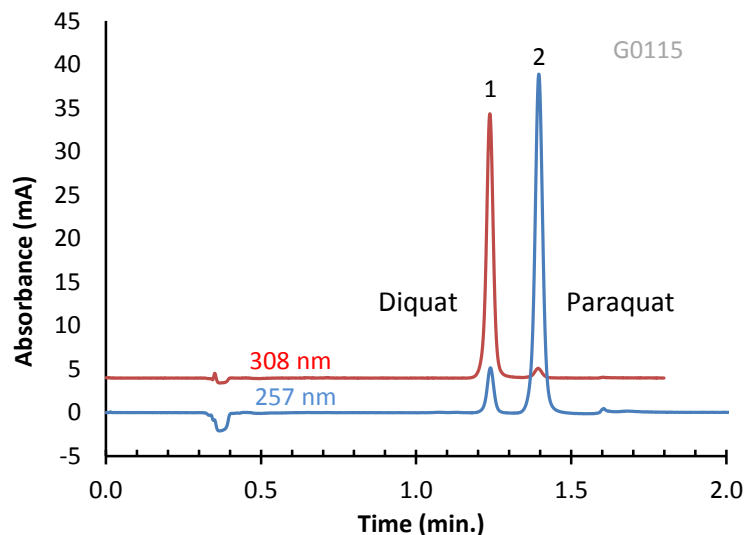


## Separation of Nonselective Herbicides on HALO-5 Phenyl-Hexyl



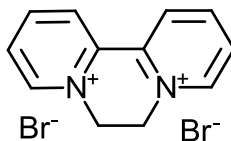
### PEAK IDENTITIES:

1. Diquat dibromide
2. Paraquat dichloride

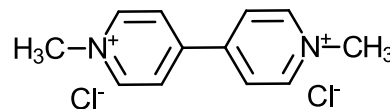
### TEST CONDITIONS:

Column: 3.0 x 100 mm, HALO-5 Phenyl-Hexyl  
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  
ECV: ~14 µL

### STRUCTURES:



Diquat Dibromide



Paraquat Dichloride

The herbicides paraquat and diquat may be separated rapidly in under 2 minutes using a HALO-5 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.