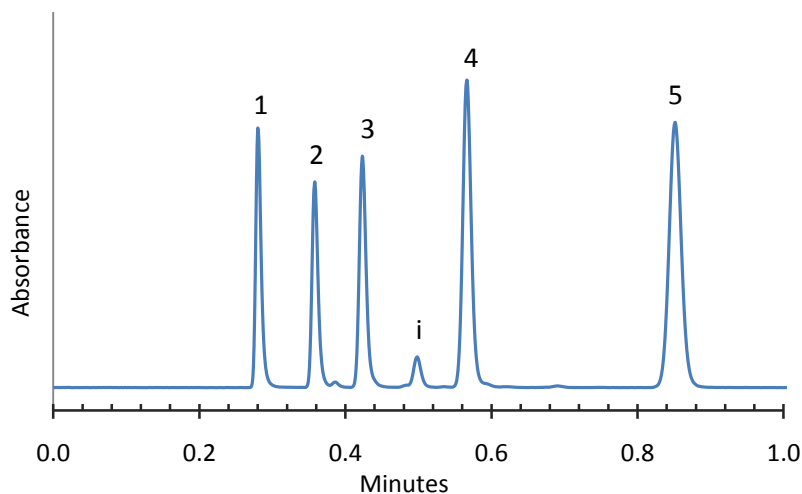


Application Note: 24-P

## Isocratic Separation of Phthalate Esters on HALO C18



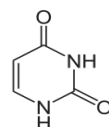
### PEAK IDENTITIES:

1. Uracil
2. Dimethylphthalate
3. Diethylphthalate  
i=impurity
4. Di-n-propylphthalate
5. Di-n-butylphthalate

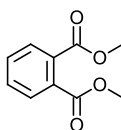
### TEST CONDITIONS:

Column: 4.6 x 50 mm, HALO C18  
Part Number: 92814-402  
Mobile Phase: 20/80 A/B  
A=water  
B= acetonitrile  
Flow Rate: 1.5 mL/min.  
Pressure: 97 Bar  
Temperature: 27°C  
Detection: UV 254 nm, VWD  
Injection Volume: 0.5 µL  
Sample Solvent: acetonitrile  
Response Time: 0.02 sec.  
Flow Cell: 2.5 µL semi-micro  
LC System: Shimadzu Prominence UFLC XR  
Extra column volume: ~14 µL

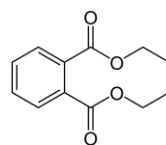
### STRUCTURES:



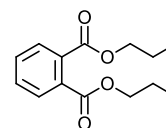
Uracil



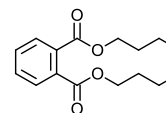
Dimethylphthalate



Diethylphthalate



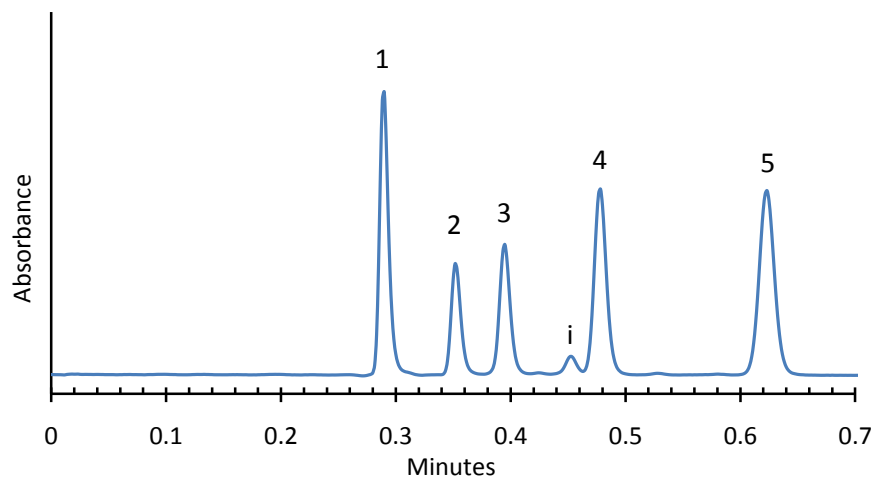
Di-n-propylphthalate



Di-n-butylphthalate

Application Note: 25-P

## Isocratic Separation of Phthalate Esters on HALO RP-Amide



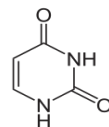
### PEAK IDENTITIES:

1. Uracil
2. Dimethylphthalate
3. Diethylphthalate
- i=impurity
4. Di-n-propylphthalate
5. Di-n-butylphthalate

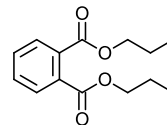
### TEST CONDITIONS:

Column: 4.6 x 50 mm, HALO RP-Amide  
Part Number: 92814-407  
Mobile Phase: 20/80 A/B  
A=water  
B= acetonitrile  
Flow Rate: 1.5 mL/min.  
Pressure: 88 Bar  
Temperature: 27°C  
Detection: UV 254 nm, VWD  
Injection Volume: 0.5 µL  
Sample Solvent: acetonitrile  
Response Time: 0.02 sec.  
Flow Cell: 2.5 µL semi-micro  
LC System: Shimadzu Prominence UFLC XR  
Extra column volume: ~14 µL

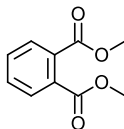
### STRUCTURES:



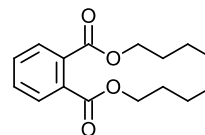
Uracil



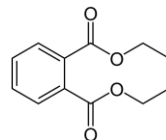
Di-n-propylphthalate



Dimethylphthalate



Di-n-butylphthalate



Diethylphthalate