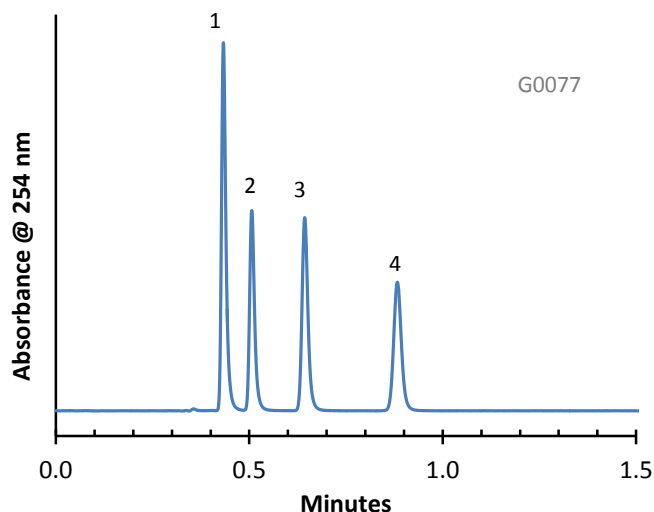


Separation of p-Hydroxybenzoic Acid Esters (Parabens) on HALO C18 (2.7 µm)



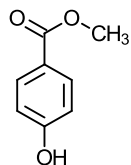
PEAK IDENTITIES:

1. Methyl paraben
2. Ethyl paraben
3. Propyl paraben
4. Butyl paraben

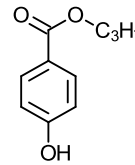
TEST CONDITIONS:

Column: 4.6 x 50 mm, HALO C18, 2.7 µm
Part Number: 92814-402
Mobile Phase: 30/70: Water/methanol
Flow Rate: 1.5 mL/min.
Pressure: 196 Bar
Temperature: 40°C
Detection: UV 254 nm, VWD
Injection Volume: 0.5 µL
Sample Solvent: 50/50-Water/methanol
Response Time: 0.02 sec.
Flow Cell: 2.5 µL semi-micro
LC System: Shimadzu Prominence UFLC XR
ECV: ~14 µL

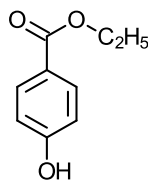
STRUCTURES:



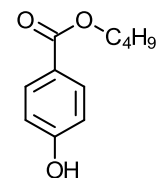
Methyl Paraben



Propyl Paraben



Ethyl Paraben



Butyl Paraben

The parabens are used as preservatives in many cosmetics, shampoos, medications and food. They are considered to be safe but recent studies have indicated a possible connection with breast cancer. Four common parabens can be rapidly determined using a short HALO, 2.7 µm, C18 column at a relatively low pressure.