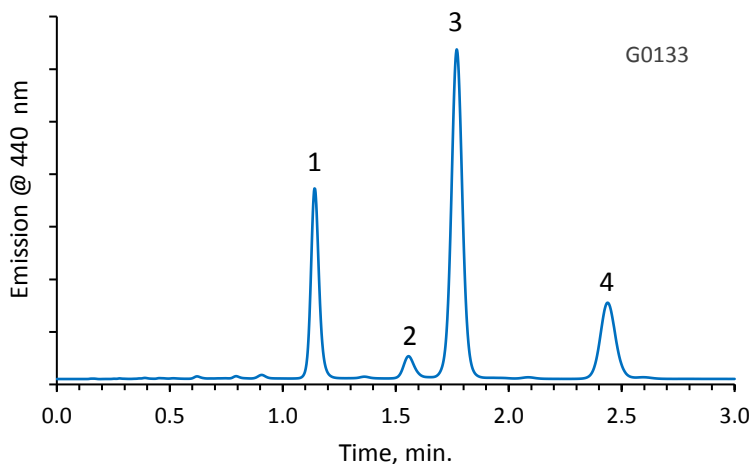


Application Note: 144-M

Isocratic Separation of Aflatoxins on HALO C18



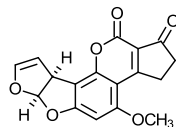
PEAK IDENTITIES:

1. Aflatoxin B1
2. Aflatoxin B2
3. Aflatoxin G1
4. Aflatoxin G2

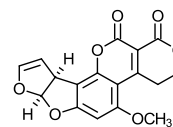
TEST CONDITIONS:

Column: HALO C18, 2.1 x 50 mm, 2.7 µm
Part Number: 92812-402
A= water
B= 50/50 acetonitrile/methanol
Isocratic: 74/26 A/B
Flow Rate: 0.8 mL/min.
Pressure: 365 bar
Temperature: 30 °C
Injection Volume: 5 µL
Sample Solvent: 70/30 water/methanol
Detection: Fluorescence Excitation - 360 nm;
Emission - 440 nm
Data Rate: 5 Hz
Response Time: 0.05 sec.
Flow Cell: 3 µL
LC System: Nexera X2

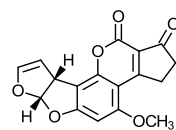
STRUCTURES:



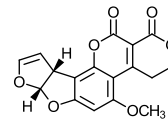
Aflatoxin B1



Aflatoxin G1



Aflatoxin B2



Aflatoxin G2

Aflatoxins are classified as mycotoxins, which are secondary metabolites produced by fungi. Under certain conditions, the fungi can grow on corn, peanuts, or tree nuts resulting in the production of aflatoxins, which are extremely toxic. A fast and sensitive method for separating four aflatoxins is demonstrated using a short HALO C18 column.