

Determination of Nivalenol (NIV) and Deoxynivalenol (DON) with postcolumn derivatisation

Method
HPLC

VFD0048J
RP Mode

Column: ProntoSIL 120-5 C18 AQ, 250 x 3.0 mm ID

Order No. 25CF184PSJ

Phase: ProntoSIL 120-5 C18 AQ

Conditions: Eluent: A: Acetonitrile
B: 0.01 M Acetic acid
Gradient: 0 – 16 min 10% A
16 – 22 min 10% - 90% A
22 – 40 min 90% - 10% A
Flow rate: 0.4 ml/min
Temperature: 25 °C
Volume: up to 200 µl
2 channel postcolumn derivatization, flow rate of 0.25 ml/min, temperature of 115 °C
Reactor Coil 1 : 1.2 ml, 0.15 M sodium hydroxide
Reactor Coil 2 : 1.6 ml, 0.03 M methyl acetoacetate and 2 M ammonium acetate
Detection: Fluorescence: excitation at 360 nm, emission at 470 nm

Substances: Deoxynivalenol (DON), Nivalenol (NIV)

Keywords: Mycotoxins, Deoxynivalenol (DON), Nivalenol (NIV)

Chromatogram:

1. Nivalenol (NIV)
2. Deoxynivalenol (DON)

