

Melamine in dog food by GC/MS using a ZB-5MSplus (EIC)

Column: Zebtron™ ZB-5MSplus, GC Cap. Column 30 m x 0.25 mm x 0.25 µm, Ea

Phase:

Dimensions: 30 meters x 0.25 mm x 0.25 µm

Order No: 7HG-G030-11

Oven Profile: 75° C for 1 min to 320 °C at 15 °C/min hold for 4 min

Carrier Gas: Constant Flow Helium, 1 mL/min

Injection: Splitless :1 1 µL @ 280°C

Detection: Mass Selective (MSD) (320°C)

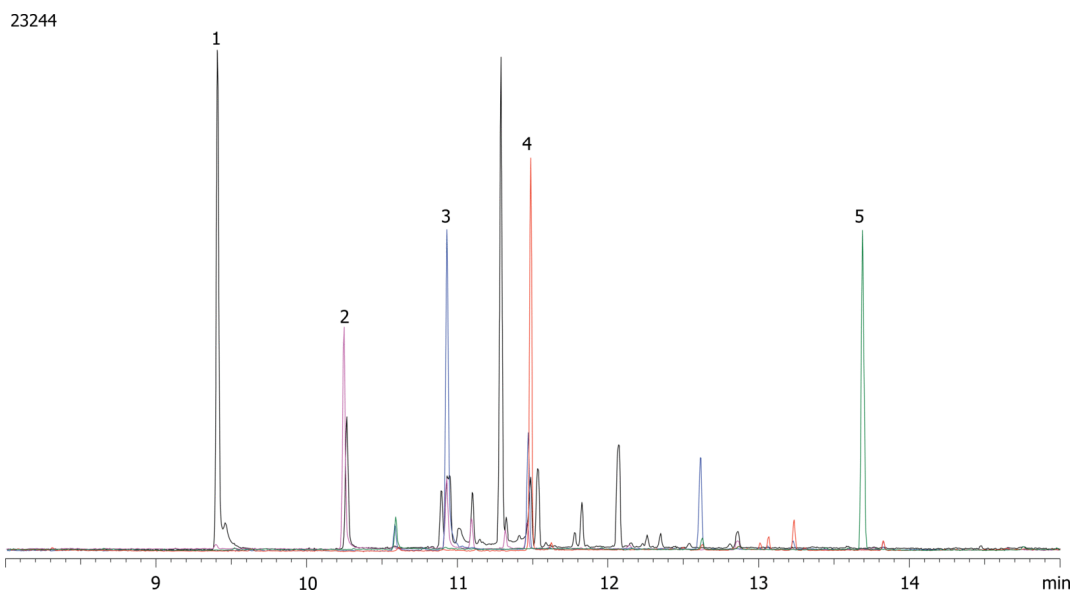
Analyst Note: Sample preparation: Combine 0.5 g of homogenized dog food with 10 mL of DEA/water/acetonitrile (1:4:5) in a 15 mL centrifuge tube. Sonicate for 30 min. Centrifuge at 5000 rpm for 10 min. Transfer 100 µL of supernatant to an autosampler vial and evaporate to dryness using nitrogen gas. Reconstitute with 100 µL of acetonitrile/pyridine (1:1) and then derivatize using 100 µL of BSTFA with 1% TCMS at 70 °C for 45 min. Inject sample into the GC/MS.

Dry dog food spiked with 100 µg/g melamine and related compounds.

Sim mode: Cyanuric acid (345,330,346), Ammelide (344,329,345), Ammeline (328,343,329), Melamine



Products used in this application:



ANALYTES:

- 1 Cyanuric acid
- 2 Ammelide
- 3 Ammeline
- 4 Melamine
- 5 Benzoguanamine

