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

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

Phase:

Dimensions: 30 meters x 0.25 mm x 0.25 µm

7HG-G030-11 Order No:

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

mL centrifuge tube. Sonicate for 30 min. Centrifuge at 5000 rpm for 10 min. Transfer 100 μ L of supernatant to an autosampler vial and evaporate to dryness using nitrogen gas. Reconstitute with 100 μ L of acetonitrile/pyridine (1:1) and then derivatize using 100 μ L of BSTFA with 1% TCMS at 70 °C for 45 min. Inject sample into the GC/MS.

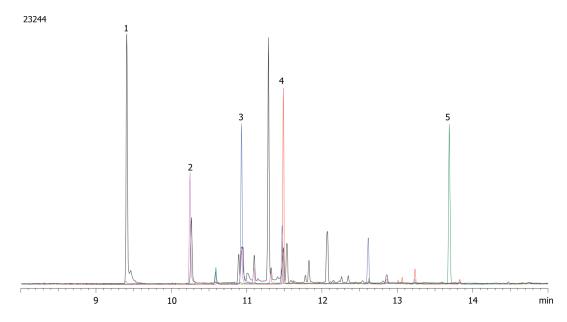
Dry dog food spiked with 100 $\mu\text{g}/\text{g}$ melamine and related compounds.

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



Products used in this application:





ANALYTES:

- Cyanuric acid
- Ammelide
- 3 Ammeline
- Melamine
- Benzoguanamine

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