

Extraction of Melamine and Cyanuric acid from animal feed using Strata X-CW

Homogenize _____g of animal feed in _____mLs of 1-2% formic acid in methanol and filter or spin down to extract only liquid portion of sample.

Option additional filtration or protein precipitation (IF needed)

Of the 250mg/25ml portion take 2.5ml of the acidified methanol extract and dilute to ~25ml of H₂O buffered with sodium phosphate buffer, final pH of sample should be ~6-7.

Use a 500mg/6ml Strata X-CW tube, we can scale down to a smaller extraction and SPE tube sorbent bed mass later once analyte concentrations are established in the raw feed and extraction.

Condition: 6-10mL of MeOH

Equilibrate: 6-10mL H₂O pH 6-7

Load: 10-25mLs of buffered aqueous sample pH 6-7 into sorbent at a lower flow rate 1-2ml/min: retention capacity of up to 25-50mgs of analytes

Wash: 2 aliquots of 6-10mLs of 5% MeOH / 95% H₂O (can increase MeOH % for cleaner elution, decrease for increased recoveries)

Elute: 2 aliquots of 6-10mLs of 5% formic acid in 1:1 MeOH: ACN pH should be low enough to neutralize the carboxylic acid sorbent ligand, pH 1-2, flow rate 1-2ml/min

Blow down and re-constitute in mobile phase.

This is a general procedure created with the information provided. We will optimize it to best fit your application to ensure optimal results. Please consult your Phenomenex Sample Prep Specialist for any optimization, troubleshooting, assistance, or questions.
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