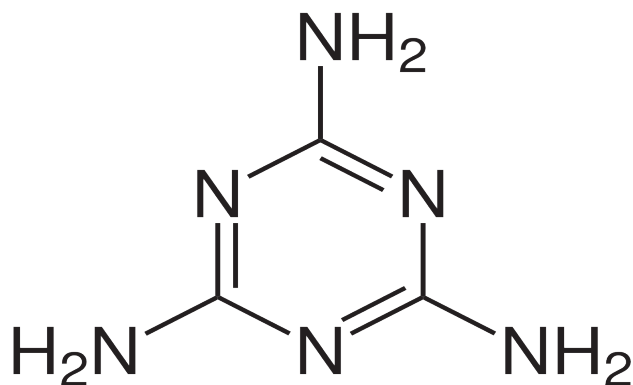


Melamine in Food Materials Using EUBCX22Z



UCT Part Numbers

EUBCX22Z
Enviro Clean® HL DVB ,
200 mg/6 mL SPE cartridge

Procedure:

1. Prepare Sample

- To 1-5 g of sample add 10-25 mL of CH₃CN/ DI H₂O (50:50).
- Shake for 5 minutes.

Centrifuge

- Transfer 5 mL of supernatant to clean glass screw top tube.
- Add 1 mL of 100 mM HCl.
- Add 1 mL of CH₂Cl₂
- Shake for 5 minutes.

Centrifuge

- Add upper layer to previous aqueous portion.
- Apply to conditioned SPE column.

2. Condition Column

- 1 x 3 mL CH₃OH.
- 1 x 3 mL DI H₂O

Note: Aspirate at < 3 inches Hg to prevent sorbent drying out.

3. Apply Sample

- Load sample at 1-2 mL / minute

4. Wash Column

- 1 x 3 mL 100 mM HCl.
- 1 x 1 mL CH₃OH.
- Dry column (5 minutes at > 10 inches Hg).

5. Elute Melamine

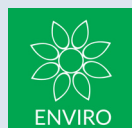
- 1 x 2 mL of CH₃OH containing 5% NH₄OH.
- 1 x 3 mL of CH₃OH containing 5% NH₄OH.
- Collect eluate at 1-2 mL/minute.

6. Evaporation

- Evaporate eluates under a gentle stream of nitrogen
< 40°C.

7. Reconstitute

- Sample in 1000 µL of CH₃CN (Add External Standard).
- Inject 5 µL.

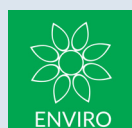


INSTRUMENT CONDITIONS	
AP1 2000 MS/MS (ESI Mode)	
Column	150 x 2.1 mm (4 µm) Diamond Hydride (MicroSolv)
Flowrate	0.50 mL/ minute

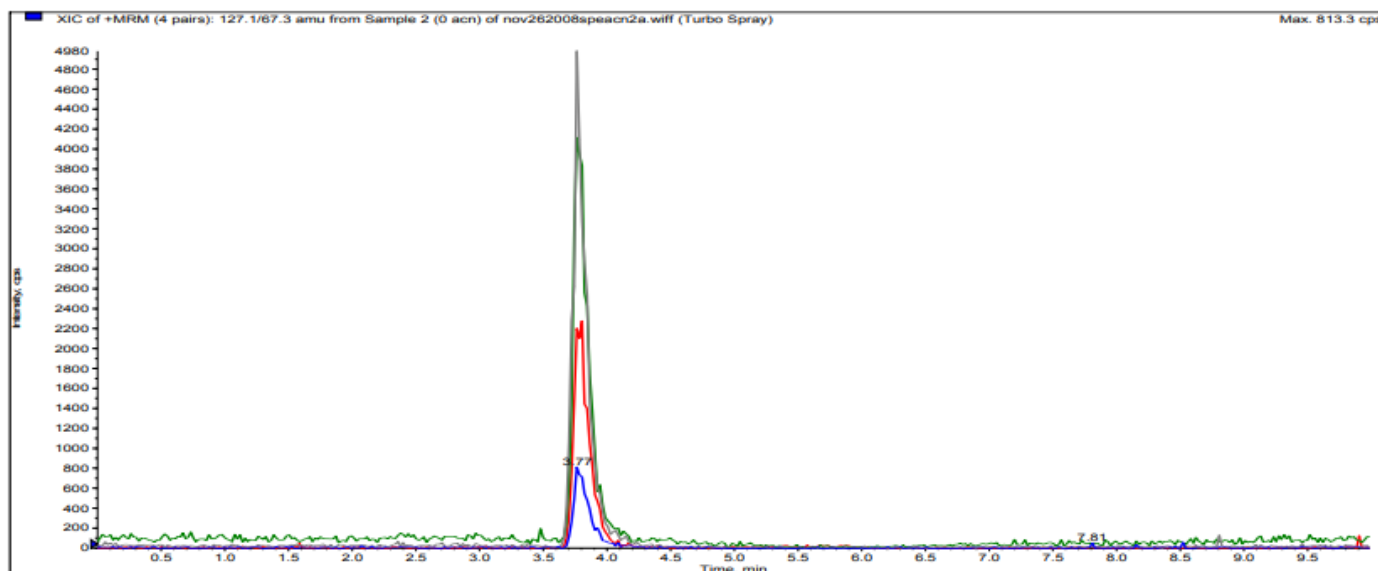
Mobile Phase		
Time	% Acetonitrile	0.1% Formic acid
0	90	10
3	20	80
3.5	90	10
10	90	10

Column Temperature: ambient

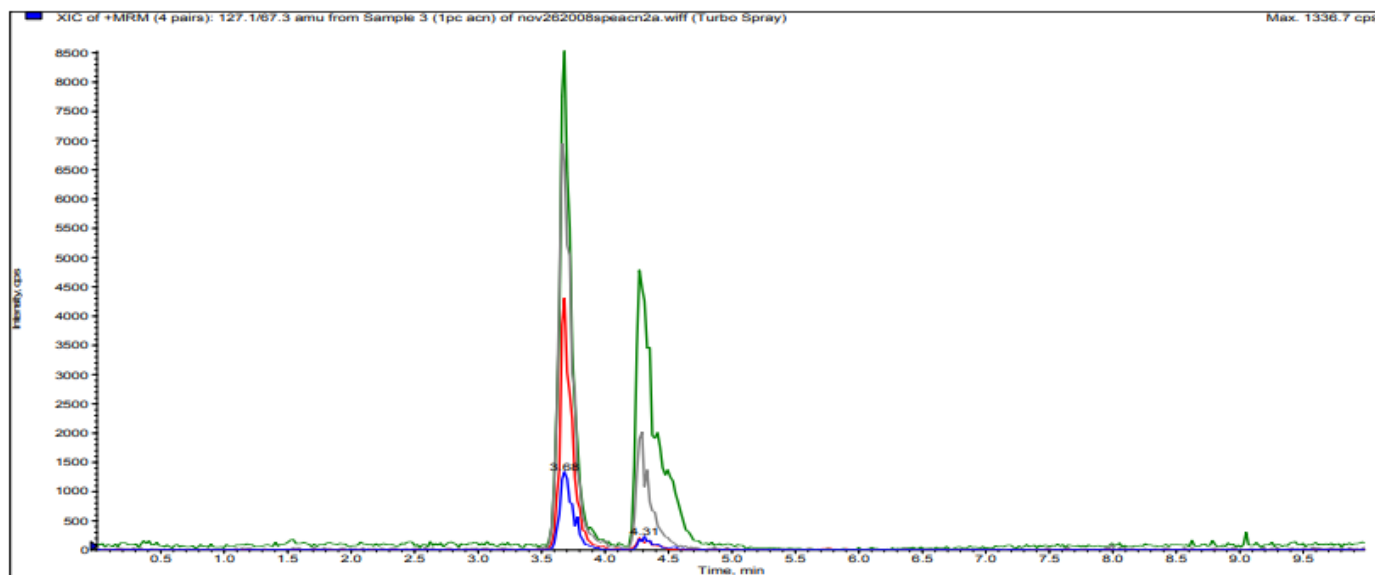
Compound	MRM
Melamine	127.1/85.1
*2, 4 Diamino 6-hydroxy	127.1/ 67.0
pyrimidine	



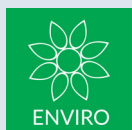
LC-MS/MS Chromatogram of: Blank Milk Powder (upper)



Spiked Milk Powder (lower)



Recovery > 90% (N=10)



DCN-900390-29

UCT, LLC • 2731 Bartram Road • Bristol, PA 19007 800.385.3153 • 215.781.9255

www.unitedchem.com Email: methods@unitedchem.com

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