Melamine in Infant Formula (Soy based)
Sample Preparation

Procedure 1 (Infant Soy based Formula-powder)

1. Intended Use
For the detection of Melamine in soy based powder infant formula.

2. Range of Detection
800-20,000 ng/mL (ppb). Samples with higher concentrations must be diluted further and re-analyzed.

3. Materials Required (Not Provided)
Pipettes capable of delivering 50, 100 and 900µL
Sonicator or vortexer
Centrifuge capable of spinning at 3,000 x g
Centrifuge tubes
Glass vials with Teflon lined caps
Melamine Sample Extraction Suspension (PN 50005E)
Eurofins Abraxis Melamine ELISA Kit (PN 50005B)

4. Notes and Precautions
To eliminate matrix interference from soy based infant formula powder to be tested for the presence of Melamine; samples must be prepared and diluted in Sample Extraction Suspension.

Sample Extraction Suspension should be thoroughly mixed immediately prior to use.

5. Procedure
5.1 Prepare the infant formula as indicated on sample package, for example, infant formula should be prepared at a ratio of 8.6 grams of formula per 2 ounces (60 mL) of water.
5.2 Add 50 uL of reconstituted milk sample into 1.95 mL of Melamine Sample Extraction Suspension in a centrifuge tube.
5.3 Using a shaking platform, shake for 10 minutes (alternatively, sample can be vortexed several times during the 10 minute incubation)
5.4 Centrifuge at approximately 3,000 x g for 5 minutes.

The sample (top layer) is now ready to analyze according to the procedure described in the Eurofins Abraxis Melamine Kit package insert.

6. Evaluation of Results
Results obtained for powder soy based infant formula prepared as described above must be multiplied by a factor of 40 to account for the sample dilution. Only use results within the analytical range of the assay (20-500 ppb). Results lower than lowest standard (20 ppb) should not be multiplied by dilution factor but should be reported as < 800 ppb. Results above the highest standard must be diluted and re-analyzed.

7. Performance Data
The sample preparation procedure detailed above was used with powdered soy based infant formula (non-recalled) spiked with various amounts of Melamine. Average recovery was 127%.

Procedure 2 (Infant Soy based Formula-Liquid)

1. Intended Use
For the detection of Melamine in soy based liquid infant formula.

2. Range of Detection
800-20,000 ng/mL (ppb). Samples with higher concentrations must be diluted further and re-analyzed.

3. Materials Required (Not Provided)
Pipettes capable of delivering 50, 100 and 900µL
Sonicator or vortexer
Centrifuge capable of spinning at 3,000 x g
Centrifuge tubes
Glass vials with Teflon lined caps
Melamine Sample Extraction Suspension (PN 50005E)
Eurofins Abraxis Melamine ELISA Kit (PN 50005B)

4. Notes and Precautions
To eliminate matrix interference from soy based infant formula to be tested for the presence of Melamine; samples must be prepared and diluted in Sample Extraction Suspension.

Sample Extraction Suspension should be thoroughly mixed immediately prior to use.

5. Procedure
5.1 Prepare the infant formula as indicated on sample package, for example, infant formula should be prepared at a 1:1 ratio with water (1 mL of water and I mL of concentrated formula).
5.2 Add 50 uL of the diluted milk sample into 1.95 mL of Melamine Sample Extraction Suspension in a centrifuge tube.
5.3 Using a shaking platform, shake for 10 minutes (alternatively, sample can be vortexed several times during the 10 minute incubation)
5.4 Centrifuge at approximately 3,000 x g for *5* minutes.

The sample (top layer) is now ready to analyze according to the procedure described in the Eurofins Abraxis Melamine Kit package insert.

6. Evaluation of Results
Results obtained for powder soy based infant formula prepared as described above must be multiplied by a factor of 40 to account for the sample dilution. Only use results within the analytical range of the assay (20-500 ppb). Results lower than lowest standard (20 ppb) should not be multiplied by dilution factor but should be reported as < 800ppb. Results above the highest standard must be diluted and re-analyzed.

7. Performance Data
The sample preparation procedure detailed above was used with powdered soy based infant formula (non- recalled) spiked with various amounts of Melamine. Average recovery was 127%.

8. Assistance
For ordering or technical assistance contact:

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