

# infochroma ag

Sumpfstr. 3, CH-6300 Zug; Fax: 041 748 50 65, Tel: 041 748 50 60  
e-mail: [info@infochroma.ch](mailto:info@infochroma.ch), [www.infochroma.ch](http://www.infochroma.ch)

## Melamine in Milk: the Analysis to the Problem

milk in China has been contaminated with Melamine. That was proved. The consequences are fatal for the youngest, the babies and small kids. The reason for adding Melamine to milk is to make it appear higher in protein in order to achieve a better price for the milk. The proteine content of the milk is measured non-specifically as cumulative parameter with the nitrogene compound determination by Kjeldahl so that the addition of Melamine was not dedected.

The findings of Melamin in milk necessitate comprehensive testing of milk based products. LC-MS is recommended as analytical method. Melamin with the chemical formula  $C_3H_6N_6$  is a heterocyclic aromatic compound; because of the polar functional amino-groups the HPLC analysis with the zwitterionic HILIC phase proves to be particularly suitable. Sample preparation can be done easily by precipitation or by SPE. The method is based on the analysis of Melamine in animal feed after the pet food recall in 2007 where wheat gluten was contaminated with Melamine.

We are happy to assist you in the realization of this application. Or address the problem directly and analyse the proteins directly with Size Exclusion columns from Shodex. The technical brochure can be downloaded from our webpage. Shodex offers the possibility to test this column free of charge and offers attractive quantity discounts.

Determination of Melamine and Cyanuric Acid Residues in Infant Formula using LC-MS/MS

<http://www.cfsan.fda.gov/~frf/lib4421.html>

Interim Method for Determination of Melamine and Cyanuric Acid Residues In Foods using LC-MS/MS

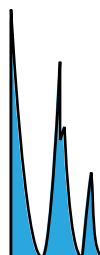
<http://www.cfsan.fda.gov/~frf/lib4422.html>

Melamin-Wikipedia

<http://en.wikipedia.org/wiki/Melamin>

Kjeldahl Method

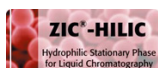
[http://en.wikipedia.org/wiki/Kjeldahl\\_method](http://en.wikipedia.org/wiki/Kjeldahl_method)



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### 8SQ2702-152

SeQuant™ ZIC®-HILIC column  
150 x 2.1 mm, 3.5  $\mu$ m, 200 Å  
CHF 1800.00/pcs.

### 8SQ2712-152

SeQuant™ ZIC®-HILIC column  
150 x 2.1 mm, 5  $\mu$ m, 200 Å  
CHF 1640.00/pcs.

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low protein-adsorption, highly hydrophilic surface,  
especially suitable for the filtration of proteins  
and biological samples.

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25 mm HPLC Filter  
Regenerated Cellulose Membrane  
0.45  $\mu$ m Pore Size  
CHF 185.00/pack of 100 pcs.



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### 8899-PP20

20 ml Polypropylene Syringe  
CHF 75.00/100 pcs.\*

### 8890-PP3

3 ml Polypropylene Syringe  
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*all prices excl. VAT, postage and packaging CHF 13.50  
quantity discounts apply on filters and syringes*

*\* price at a quantity of 500 pcs.*

<http://www.sach.ch/applica.html>



## APPLICA 2009

16.-17. Juni 2009  
Hotel Arte,  
Olten, Schweiz

**Fachseminar zum Thema  
Moderne Trennanalytik  
Wasser & Proteine**