
EURL-MP-method_011 (version 1)
Determination of hydrocyanic acid in feed by HPLC-FLD

Analyte group: plant toxins
Analyte(s): hydrocyanic acid

Commodity group: animal feeding stuffs
Commodities validated: see EN 16160

Technique: Liquid chromatography / fluorescence detection (HPLC-FLD)

Modifications compared to previous version:
Not applicable

Method drafted by:

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Suggested Citation: EURLMP-method_011 v1, 2023, Determination of hydrocyanic acid in feed by HPLC-FLD, EURL mycotoxins and plant toxins, WFSR Wageningen University & Research.

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1 Introduction

The method follows the European Standard EN 16160 “Animal feeding stuffs - Determination of Hydrocyanic acid by HPLC”.

2 Scope

See EN 16160[\[1\]](#)

3 Principle

See EN 16160[\[1\]](#)

4 Reagents

All reagents must be "pro analysis" quality, or higher quality if stated.

4.1 Analytical standards

See EN 16160[\[1\]](#)

4.2 Chemicals

See EN 16160[\[1\]](#)

4.3 Solutions and reagents

See EN 16160[\[1\]](#)

4.4 Standard solutions

See EN 16160[\[1\]](#)

5 Materials & equipment

Any reference to type and/or product is only to inform the user and to identify the equipment and does not imply exclusion of similar equipment.

5.1 Materials

See EN 16160[\[1\]](#)

5.2 Equipment

See EN 16160[\[1\]](#)

6 Procedures

6.1 Quality control

See EN 16160[\[1\]](#)

6.2 Pre-treatment

See EN 16160[\[1\]](#)

6.3 Extraction and preparation of test solutions

6.3.1 Extraction

See EN 16160^[1]

6.3.2 Enzymatic breakdown

See EN 16160^[1]

6.3.3 Steam distillation

See EN 16160^[1]

6.3.4 Derivatization

See EN 16160^[1]

7 HPLC-FLD analysis

7.1 Injection sequence

See EN 16160^[1]

8 Evaluation and calculations

8.1 Calculation of hydrocyanic acid content

See EN 16160^[1]

8.2 Calculation of recovery

See EN 16160^[1]

8.3 Criteria for acceptance of results

See EN 16160^[1]

9 References

[1] European Committee for Standardization (2012) Animal feeding stuffs – Determination of hydrocyanic acid by HPLC. EN 16160:2012