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Chicken tissue and eggs — Determination of marker residues of nicarbazin — Liquid chromatography tandem mass spectrometry method

Tissu de poulet et œufs — Détermination des résidus marqueurs de la nicarbazine — Méthode par chromatographie en phase liquide couplée à un spectromètre de masse en tandem

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Foreword

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This document was prepared by Technical Committee ISO/TC 34, *Food products*, Subcommittee SC 6, *Meat, poultry, fish, eggs and their products*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Chicken tissue and eggs — Determination of marker residues of nicarbazin — Liquid chromatography tandem mass spectrometry method

1 Scope

This document specifies a liquid chromatography tandem mass spectrometry (LC-MS/MS) method for the determination of marker residues of nicarbazin (4,4-dinitrocarbanilide) in chicken tissue and eggs.

This document is applicable to the determination of marker residues of nicarbazin (4,4-dinitrocarbanilide) in chicken tissue (including muscle, liver and kidney) and eggs.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at https://www.electropedia.org/

4 Principle

The test portion is extracted with acetonitrile and then purified by acetonitrile-saturated n-hexane or solid phase extraction column. The 4,4-dinitrocarbanilide is determined and confirmed by LC-MS/MS, and is quantified with an internal standard method.

5 Reagents and materials

Use only reagents of recognized analytical grade, unless otherwise specified.

5.1 Water, at least grade 1 conforming to ISO 3696.

5.2 Acetonitrile, HPLC grade.

5.3 Formic acid, HPLC grade.

5.4 Ammonium acetate, HPLC grade.

5.5 N,N-Dimethylformamide.