

STN	<p>Krmivá pre zvieratá Metódy odberu vzoriek a analýz Skríning a stanovenie povolených kokcidiostatík ako aditív pri 1 %-nej a 3%-nej krížovej kontaminácii, nepovolených kokcidiostatík a jedného z antibiotík na subaditívnej úrovni v kŕmnych zmesiach metódou vysokoúčinnej kvapalinovej chromatografie (HPLC) s tandemovou hmotnostnou spektrometriou (LC-MS/MS)</p>	STN EN 17299
		46 7097

Animal feeding stuffs: Methods of sampling and analysis - Screening and determination of authorized coccidiostats at additive and 1 % and 3 % cross-contamination levels, and of non-registered coccidiostats and of one antibiotic at sub-additive levels, in compound feed with High Performance Liquid Chromatography – Tandem Mass Spectrometry detection (LC-MS/MS)

Táto norma obsahuje anglickú verziu európskej normy.

This standard includes the English version of the European Standard.

Táto norma bola označená vo Vestníku ÚNMS SR č. 01.20.

Obsahuje: EN 17299:2019

130003

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2020

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 17299

August 2019

ICS 65.120; 71.040.50

English Version

**Animal feeding stuffs: Methods of sampling and analysis -
Screening and determination of authorized coccidiostats at
additive and 1 % and 3 % cross-contamination level, and
of non-registered coccidiostats and of one antibiotic at
sub-additive levels, in compound feed with High
Performance Liquid Chromatography - Tandem Mass
Spectrometry detection (LC-MS/MS)**

Aliments des animaux: Méthodes d'échantillonnage et
d'analyse - Recherche et dosage dans des aliments
composés pour animaux des coccidiostatiques
 autorisés au taux d'additif et de contamination croisée
à 1 % et 3 %, de coccidiostatiques non enregistrés et
d'un antibiotique aux taux sub-additifs, par
chromatographie en phase liquide à haute
performance couplée à une détection par
spectrométrie de masse en tandem (CL-SM/SM)

Futtermittel - Probenahme- und
Untersuchungsverfahren - Bestimmung zugelassener
Kokzidiostatika in Konzentrationen von Zusatzstoffen
und deren Verschleppungen im Bereich von 1 % bis 3
% in Mischfuttermitteln mittels Hochleistungs-LC-MS

This European Standard was approved by CEN on 17 June 2019.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Contents

	Page
European foreword.....	3
1 Scope.....	4
2 Normative references.....	4
3 Terms and definitions	4
4 Principle	5
5 Reagents and materials.....	5
6 Apparatus.....	21
7 Sampling.....	23
8 Preparation of test sample	23
8.1 General.....	23
8.2 Laboratory sample.....	23
8.3 Test sample	23
8.4 Test portion.....	23
9 Procedure.....	23
9.1 General.....	23
9.2 Positive and negative control samples.....	23
9.2.1 General.....	23
9.2.2 Positive control sample PCS	24
9.2.3 Negative control sample NCS	24
9.3 Sample preparation.....	24
9.3.1 Extraction.....	24
9.3.2 Filtration	24
9.3.3 Dilution	24
9.4 Quantification through standard addition.....	25
9.5 HPLC analysis.....	25
9.5.1 Analytical conditions	25
9.5.2 HPLC determination.....	27
9.5.3 Criteria for acceptance of the analytical result	28
10 Calculation	28
11 Test report.....	30
Annex A (informative) Complementary instrumental information.....	31

European foreword

This document (EN 17299:2019) has been prepared by Technical Committee CEN/TC 327 "Animal feeding stuffs – Methods of sampling and analysis", the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by February 2020, and conflicting national standards shall be withdrawn at the latest by February 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document has been prepared under a standardization request given to CEN by the European Commission and the European Free Trade Association.

According to the CEN-CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

EN 17299:2019 (E)**1 Scope**

This document specifies a high performance liquid chromatographic – tandem mass spectrometry (HPLC-MS/MS) method for the simultaneous screening and/or determination of the eleven authorized coccidiostats (halofuginone hydrobromide, robenidine hydrochloride, nicarbazin, diclazuril, decoquinate, monensin sodium, salinomycin sodium, narasin, lasalocid A sodium, semduramicin sodium and maduramicin ammonium alpha) contents in compound feeds and feed materials of plant origin at additive and cross-contamination levels and of the five non-registered coccidiostats (ethopabate, clopidol, ronidazole, dimetridazole and amprolium) at sub-additive levels and for the screening of the prohibited furazolidone antibiotic at sub-additive level, in the same matrices. It has been fully validated only for poultry, cattle and pig compound feeds.

The range of application of the method is fit for the purpose of the screening and determination of all eleven registered coccidiostats at the values set by European legislation, of the non-registered coccidiostats and of the screening of the banned antibiotic.

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.

EN ISO 6498, *Animal feeding stuffs — Guidelines for sample preparation (ISO 6498)*

koniec náhl'adu – text d'alej pokračuje v platenej verzii STN