



**NSAI**  
Standards

Irish Standard  
I.S. EN 16930:2017

# Animal feeding stuffs: Methods of sampling and analysis - Determination of carbadox and olaquinox by HPLC/UV

**I.S. EN 16930:2017**

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

*This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):*

*NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.*

*This document is based on:*

EN 16930:2017

*Published:*

2017-07-26

*This document was published under the authority of the NSAI and comes into effect on:*

2017-08-13

ICS number:

65.120

NOTE: If blank see CEN/CENELEC cover page

NSAI  
1 Swift Square,  
Northwood, Santry  
Dublin 9

T +353 1 807 3800  
F +353 1 807 3838  
E standards@nsai.ie  
W NSAI.ie

Sales:  
T +353 1 857 6730  
F +353 1 857 6729  
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

## National Foreword

I.S. EN 16930:2017 is the adopted Irish version of the European Document EN 16930:2017, Animal feeding stuffs: Methods of sampling and analysis - Determination of carbadox and olaquinox by HPLC/UV

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

**Compliance with this document does not of itself confer immunity from legal obligations.**

*In line with international standards practice the decimal point is shown as a comma (,) throughout this document.*

This page is intentionally left blank

EUROPEAN STANDARD

**EN 16930**

NORME EUROPÉENNE

EUROPÄISCHE NORM

July 2017

---

ICS 65.120

English Version

## Animal feeding stuffs: Methods of sampling and analysis - Determination of carbadox and olaquinox by HPLC/UV

Aliments des animaux - Méthodes d'échantillonnage et  
d'analyse - Détermination des teneurs en carbadox et  
olaquinox par CLHP/UV

Futtermittel - Probenahme- und  
Untersuchungsverfahren - Bestimmung von Carbadox  
und Olaquinox mittels HPLC/UV

This European Standard was approved by CEN on 14 May 2017.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, 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: Avenue Marnix 17, B-1000 Brussels**

<b>Contents</b>	<b>Page</b>
European foreword.....	4
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Principle</b> .....	<b>5</b>
<b>4 Reagents and materials</b> .....	<b>5</b>
4.1 Water, demineralized or deionized or at least equivalent .....	6
4.2 Methanol.....	6
4.3 Acetonitrile.....	6
4.4 Glacial acetic acid, minimum purity 96 %.....	6
4.5 Ammonium acetate water free salt, CH <sub>3</sub> CO <sub>2</sub> NH <sub>4</sub> .....	6
4.6 Extraction solvent: methanol water mixture (1:1 v:v) .....	6
4.7 Ammonium acetate buffer, 25 mM, pH = 4,35 .....	6
4.8 Mobile phase for HPLC: acetonitrile: buffer mixture (10:90; v:v).....	6
4.9 Carbadox dissolving solvent: methanol: acetonitrile mixture (1:1; v:v) .....	6
4.10 Reference standards .....	6
4.11 Standard solutions.....	6
4.12 Neutral aluminium oxide, Brockmann activity I.....	8
4.13 Neutral aluminium oxide SPE cartridge, 2 cm <sup>3</sup> , 1850 mg.....	8
4.14 Technical methanol.....	8
<b>5 Apparatus</b> .....	<b>8</b>
5.1 pH meter .....	8
5.2 Solvent filtration system, suitable for 0,45 µm membrane filters .....	8
5.3 Ultrasonic bath.....	8
5.4 Rotary on mechanical shaker .....	8
5.5 Centrifuge.....	8
5.6 Glass wool .....	8
5.7 Glass column for chromatography, length 200 mm to 400 mm; internal diameter 10 mm, restricted at the end and fitted with a wad of glass wool (5.6) or equivalent column.....	8
5.8 Filter papers or glass microfibre filter .....	8
5.9 Cellulose acetate membrane filters of pore size 0,45 µm.....	8
5.10 PVDF syringe filters of pore size 0,45 µm and adaptable syringes .....	8
5.11 HPLC system.....	8
5.12 Refrigerator or refrigerated chamber at a temperature set between 0 °C and 8 °C .....	9
<b>6 Sampling</b> .....	<b>9</b>
<b>7 Preparation of test sample</b> .....	<b>9</b>
7.1 General.....	9
7.2 Laboratory sample.....	9
7.3 Test sample .....	9
7.4 Test portion.....	9
<b>8 Procedure</b> .....	<b>9</b>
8.1 Extraction of feeding stuffs containing 0,5 mg/kg to 100 mg/kg of growth promoters.....	9
8.2 Filtration .....	9
8.3 Purification.....	9

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

- 
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
  - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-