

**Loomasööt. Lactobacillus spp. isoleerimine ja loendamine**

**Animal feeding stuffs - Isolation and enumeration of Lactobacillus spp.**

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NATIONAL FOREWORD

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English Version

## Animal feeding stuffs - Isolation and enumeration of *Lactobacillus* spp.

Aliments des animaux - Isolement et dénombrement du  
*Lactobacillus* spp.

Futtermittel - Keimzählung von *Lactobacillus* spp.

This European Standard was approved by CEN on 1 August 2009.

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## Foreword

This document (EN 15787:2009) has been prepared by Technical Committee CEN/TC 327 “Animal feeding stuffs”, 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of an identical text or by endorsement, at the latest by March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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## Introduction

This methodology has been developed to enumerate probiotic lactobacilli to enable the European Commission to control proper labelling of animal feeding products (EU project SMT4-CT98-2235 – “Methods for the official control of probiotics (microorganisms) used as feed additives”) [1]. The described methodology was validated in an interlaboratory study [2].

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## 1 Scope

This European Standard defines general rules for the enumeration of probiotic lactobacilli in feed samples (additives, premixtures and feeding stuffs) that contain lactobacilli as a single bacterial component or in a mixture with other microorganisms. This standard is not applicable to mineral feeds, which are defined as complementary feeding stuffs composed mainly of minerals and containing at least 40% crude ash (Council Directive 79/373/EEC [3]).

There are different categories of feed samples:

- a) Additives containing about  $10^{10}$  colony forming units (CFU)/g;
- b) Premixtures containing about  $10^8$  CFU/g;
- c) Feeds, meal or pellets, which contain about  $10^6$  CFU/g and include complete feeding stuffs and milk replacers.

The detection limit is as defined in EN ISO 7218.

## 2 Normative references

The following referenced documents are indispensable for the application 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 6887-1, *Microbiology of food and animal feeding stuffs - Preparation of test samples, initial suspension and decimal dilutions for microbiological examination - Part 1: General rules for the preparation of the initial suspension and decimal dilutions (ISO 6887-1:1999)*

EN ISO 7218, *Microbiology of food and animal feeding stuffs - General requirements and guidance for microbiological examinations (ISO 7218:2007)*

ISO 6498, *Animal feeding stuffs – Preparation of test samples*

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

### 3.1

#### **lactobacilli (described by their characteristics as used for this standard)**

lactobacilli are bacteria which form colonies fitting the description of these species on the specified selective medium after incubation of 48 h to 72 h at a temperature of 37 °C under anaerobic conditions [4]:

Morphology of colonies:

- a) circular;
- b) regular or irregular (starry) surrounding;
- c) convex or conical;
- d) dull or glistening surface;