## საქართველოს სტანდარტი

სასოფლო-სამეურნეო და სატყეო მანქანა-დანადგარები - სპრეიერებისთვის გარემოსდაცვითი მოთხოვნები - ნაწილი 3: ბუჩქების და ხეების მოსავლის სპრეი (ისო 16119- 3: 2013)

საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტო თბილისი

## სსტ ენ ისო 16119-3:2013/2019

## საინფორმაციო მონაცემები

- 1 **შემუშავებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს სტანდარტების დეპარტამენტის მიერ
- 2 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს 2019 წლის 6 დეკემბრის № 98 განკარგულებით
- 3 მიღებულია გარეკანის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ ისო 16119-3:2013 "სასოფლო-სამეურნეო და სატყეო მანქანა-დანადგარები სპრეიერებისთვის გარემოსდაცვითი მოთხოვნები ნაწილი 3: ბუჩქების და ხეების მოსავლის სპრეი (ისო 16119- 3: 2013)"

### 4 პირველად

**5 რეგისტრირებულია** საქართველოს სტანდარტების და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2019 წლის 6 დეკემბერი N268-1.3-016413

დაუშვებელია წინამდებარე სტანდარტის სრული ან ნაწილობრივი კვლავწარმოება, ტირაჟირება და გავრცელება სსიპ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს ნებართვის გარეშე

## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 16119-3

March 2013

ICS 65.060.40

Supersedes EN 12761-3:2001

#### **English Version**

# Agricultural and forestry machinery - Environmental requirements for sprayers - Part 3: Sprayers for bush and tree crops (ISO 16119-3:2013)

Matériel agricole et forestier - Exigences environnementales pour les pulvérisateurs - Partie 3: Pulvérisateurs pour arbustes et arboriculture (ISO 16119-3:2013) Land- und Forstmaschinen - Pflanzenschutzgeräte zum Ausbringen von Pflanzenschutzmitteln und flüssigen Düngemitteln - Umweltschutz - Teil 3: Sprühgeräte für Raumkulturen und vergleichbare Geräte (ISO 16119-3:2013)

This European Standard was approved by CEN on 5 January 2013.

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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
Foreword	3
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EC Directive 2009/127/EC amending 2006/42/EC	,

#### **Foreword**

This document (EN ISO 16119-3:2013) has been prepared by Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry".

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 September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.

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

This document supersedes EN 12761-3:2001.

The following major changes were introduced:

- extension of the scope;
- updating of the normative references;
- addition of a definition;
- addition of a new clause "List of significant hazards";
- revision of requirements on control of spray drift and on cleaning:
- addition of a clause "Verification";
- completion of clause "Instruction handbook";
- deletion of Annex A "Test method for cleaning plant protection product cans", and deletion of Annex B
  "Example of device for cleaning of plant protection product cans" and addition of a reference to
  ISO 21278-1;
- addition of Annex ZA.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive.

For relationship with EU Directive, see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: 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, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Annex ZA

(informative)

## Relationship between this European Standard and the Essential Requirements of EC Directive 2009/127/EC amending 2006/42/EC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of the New Approach Directive 2009/127/EC amending 2006/42/EC.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive and associated EFTA regulations.

**WARNING** — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

## INTERNATIONAL STANDARD

ISO 16119-3

First edition 2013-03-01

# Agricultural and forestry machinery — Environmental requirements for sprayers —

Part 3: **Sprayers for bush and tree crops** 

Matériel agricole et forestier — Exigences environnementales pour les pulvérisateurs —

Partie 3: Pulvérisateurs pour arbustes et arboriculture





#### **COPYRIGHT PROTECTED DOCUMENT**

© ISO 2013

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org

Published in Switzerland

Co	ntents	Page
	eword	
Intr	roduction	v
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	List of significant hazards	2
5	Requirements 5.1 General	3
	5.2 Volume/hectare adjustment system	8
	5.3 Distribution of liquid and air	8
	5.3 Distribution of liquid and air	9
	5.5 Cleaning devices	10
	5.6 Additional requirements for spray guns and lances	10
6	Verification	10
7	Marking	11
8	Instruction handbook	
Bibl	liography	12

#### **Foreword**

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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

ISO 16119-3 was prepared by the European Committee for Standardization (CEN) Technical Committee CEN/TC 144, *Tractors and machinery for agriculture and forestry*, in collaboration with ISO Technical Committee TC 23, *Tractors and machinery for agriculture and forestry*, Subcommittee SC 6, *Equipment for crop protection*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

ISO 16119 consists of the following parts, under the general title *Agricultural and forestry machinery* — *Environmental requirements and testing for sprayers*:

- Part 1: General
- Part 2: Horizontal boom sprayers
- Part 3: Sprayers for bush and tree crops
- Part 4: Fixed and semi-mobile sprayers

## Introduction

The requirements of this part of ISO 16119 are based on the test methods given in ISO 5682-2:1997, which were primarily developed for hydraulic sprayers. For other types of sprayers, other test methods and/or test criteria may be needed and may be the subject of future investigation/revision of this part of ISO 16119.

This document is a type C standard as stated in ISO 12100.

The machinery concerned and the extent to which hazards, hazardous situations and hazardous events are covered are indicated in the scope of this document.

When provisions of this type C standard are different from those which are stated in type A or B standards, the provisions of this type C standard take precedence over the provisions of the other standards, for machines that have been designed and built according to the provisions of this type C standard.