

**Põllu- ja metsamajanduse masinad. Taimekaitsepritsid ja vedelväetise laoturid. Keskkonnakaitse. Nõuded ja katsetusmeetodid. Osa 1: Üldist**

**Agricultural and forestry machinery - Environmental requirements and testing for sprayers - Part 1: General (ISO 16119-1:2013)**

## EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN ISO 16119-1:2013 sisaldab Euroopa standardi EN ISO 16119-1:2013 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 16119-1:2013 consists of the English text of the European standard EN ISO 16119-1:2013.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

**Agricultural and forestry machinery - Environmental  
requirements for sprayers - Part 1: General (ISO 16119-1:2013)**

Matériel agricole et forestier - Exigences  
environnementales pour les pulvérisateurs - Partie 1:  
Généralités (ISO 16119-1:2013)

Land- und Forstmaschinen - Pflanzenschutzgeräte zum  
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Düngemitteln - Umweltschutz - Teil 1: Allgemeines (ISO  
16119-1:2013)

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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

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## Foreword

This document (EN ISO 16119-1:2013) 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of an identical text or by endorsement, at the latest by September 2013, and conflicting national standards shall be withdrawn at the latest by September 2013.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 12761-1:2001.

The following major changes were introduced:

- extension of the scope;
  - updating of the normative references;
  - revision of the definitions;
  - addition of requirements on losses, indication of pesticide in use, filling, cleaning and servicing;
  - modification and addition of new instructions;
- addition of Annexes A and 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.

**NOTE** Unless used with a specific part of ISO 16119, this part of ISO 16119 does not give presumption of conformity.

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## Introduction

It is important that biological, ecological and economic considerations are taken into account when carrying out plant protection by spraying. For this, a comprehensive knowledge of liquids for spraying — including the limitations of their use — and suitable sprayers are necessary.

ISO 16119 gives the minimum requirements for sprayers, with particular emphasis on minimizing environmental damage, focusing on

- the deposition of liquid on the target and distribution,
- a minimization of the unintentional spreading of plant protection products into the surrounding environment, and
- an improvement in the use and operation of plant protection equipment.

# Agricultural and forestry machinery — Environmental requirements for sprayers —

## Part 1: General

### 1 Scope

This part of ISO 16119 specifies general requirements for the design and performance of sprayers, as defined in ISO 5681, with regard to minimizing the potential risk of environmental contamination during use, including misuse foreseeable by the manufacturer. It also specifies the requirements for identification of the sprayer and certain of its components, and the minimum content of the instruction handbook.

It is intended to be used with each of the other parts of ISO 16119, which give requirements specific to particular types of sprayers (see [Annex A](#)). This part of ISO 16119 is applicable to all types of sprayers used in agriculture, horticulture, forestry and other areas, except knapsack sprayers. It does not cover safety aspects (see ISO 4254-6).

NOTE Knapsack sprayers are covered by ISO 19932, which deals with safety as well as environmental aspects.

This part of ISO 16119 is not applicable to sprayers manufactured before the date of its publication.

### 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 4254-6:2009, *Agricultural machinery — Safety — Part 6: Sprayers and liquid fertilizer distributors*

ISO 5681:1992, *Equipment for crop protection — Vocabulary*

ISO 10625, *Equipment for crop protection — Sprayer nozzles — Colour coding for identification*

ISO 19732:2007, *Equipment for crop protection — Sprayer filters — Colour coding for identification*

### 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 5681 apply.

### 4 Requirements

#### 4.1 General

Sprayers and their components shall be reliable and so designed that they can be used in accordance with their intended use as described in the instruction handbook, in order to minimize the potential risk of environmental contamination.

They shall be designed so that they can be operated safely, with adequate control of the processes carried out. It shall be possible to stop the application of pesticide immediately from the operator's position.