

**Põllumajandus- ja metsatöömasinad.  
Taimekaitsepritsid ja vedelväetise laoturid. Ohutus**

Agricultural and forestry machinery - Sprayers and  
liquid fertilizer distributors - Safety

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 907:1999 sisaldab Euroopa standardi EN 907:1997 ingliskeelset teksti.</p> <p>Standard on kinnitatud Eesti Standardikeskuse 12.10.1999 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.</p> <p>Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 30.04.1997.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 907:1999 consists of the English text of the European standard EN 907:1997.</p> <p>This standard is ratified with the order of Estonian Centre for Standardisation dated 12.10.1999 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.</p> <p>Date of Availability of the European standard text 30.04.1997.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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**Võtmesõnad:** agricultural machinery, agricultural sprayers, design, hazardous areas, hazards, liquids, manure, marking, requirements, safety, technical notices

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**English version**

Agricultural and forestry machinery

**Sprayers and liquid fertilizer distributors  
Safety**

Matériel agricole et forestier – Pulvérisateurs et distributeurs d'engrais liquides – Sécurité

Land- und Forstmaschinen – Spritz- und Sprühgeräte zum Ausbringen von Pflanzenschutzmitteln und flüssigen Düngemitteln – Sicherheit

This European Standard was approved by CEN on 1997-04-03.

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 Central Secretariat or to any CEN member.

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**CEN**

European Committee for Standardization  
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Europäisches Komitee für Normung

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## Foreword

This European Standard has been prepared by Technical Committee CEN/TC 144 "Tractors and machinery for agricultural and forestry", the secretariat of which is held by AFNOR.

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 October 1997, and conflicting national standards shall be withdrawn at the latest by October 1997.

This European Standard 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(s).

The annex A is normative and contains the "List of hazards".

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

## 0 Introduction

The extent to which hazards are covered is indicated in the scope of this standard. These hazards are specific to sprayers and liquid fertilizer distributors. The hazards that are common to all the agricultural and forestry machines will be dealt with in a general standard on common requirements currently in preparation.

Machines shall comply as appropriate with EN 292 for hazards which are not dealt with and especially with annex A of EN 292-2:1991/A1:1995 when EN 292 does not give precise requirements.

## 1 Scope

This standard specifies safety requirements and their verification for the design and construction of sprayers for pesticide products and liquid fertilizer application.

This standard is applicable to mounted, semi-mounted, trailed and self-propelled agricultural sprayers designed for use by one operator only.

It is not applicable to pedestrian controlled sprayers, neither to knapsack sprayers, nor to aerial sprayers.

This standard deals with mechanical hazards and risks to the operator when handling the applied chemical products and operation of equipment. It does not cover the hazards related to pressurized tanks.

NOTE 1 : Such tanks will be covered by the European Regulations on pressure equipment (currently in preparation).

It describes methods for elimination or reduction of risks which need specific requirements for sprayers and liquid fertilizer distributors. It does not deal with general hazards particularly general hazards related to mobility, including those specific to self-propelled machines. These aspects will be dealt with in another standard produced by CEN/TC 144 (see introduction).

In addition, it specifies the type of information on safe working practices to be provided by the manufacturer.

The list of significant hazards dealt with in this standard is given in annex A. Annex A also indicates the hazards which have not been dealt with.

Environmental aspects have not been considered in this standard.

This standard applies primarily to machines which are manufactured after the date of issue of the standard.

NOTE 2 : Non-restrictive examples of machines are given in annex B.

## 2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 292-1	1991	Safety of machinery - Basic concepts, general principles for design - Part 1 : Basic terminology, methodology
EN 292-2	1991	Safety of machinery - Basic concepts, general principles for design - Part 2 : Technical principles and specifications
EN 292-2: 1991/A1:1995		Safety of machinery - Basic concepts, general principles for design - Part 2 : Technical principles and specifications
EN 294	1992	Safety of machinery - Safety distances to prevent danger zones being reached by the uppers limbs
EN 25353	1988	Earth-moving machinery and tractors and machinery for agriculture and forestry - Seat index point
ISO 5681	1992	Equipment for crop protection - Vocabulary

## 3 Definitions

For the purposes of this standard, the definitions given in ISO 5681 and EN 292-1 apply.

## 4 Safety requirements and/or measures

### 4.1 General

Unless otherwise specified in this standard, the machine shall comply with the requirements of tables 1, 3, 4 and 6 of EN 294:1992.

It shall be possible for the operator to handle and operate the machine, including filling and maintenance, while wearing protective clothing specified in the instructions from the manufacturers of the machine and of the products applied.

It shall be possible to carry out servicing and maintenance operations on pumps and filters without leaking out of the tank, when it is filled to its nominal volume. This can be achieved, for example, by appropriate positioning of components, insulation by means of a tap or valves.

### 4.2 Protection against hazards related to moving power transmission parts

To ensure protection against hazards related to accessible moving power transmission parts, the machine shall be fitted with fixed guards (in accordance with 3.22.1 of EN 292-1:1991).

When frequent access is foreseen, the machine shall be fitted with guards needing a tool for their opening. These guards shall remain attached to the machine when opened (for example by means of hinges) and automatically lock in the closed position without the use of a tool.