

## საქართველოს სტანდარტი

სასოფლო სამეურნეო ტრაქტორები და თვითკონტროლირებადი მაშინები -  
შემსრულებლის (მძღოლის) დაცვა მავნე შემცველობის წინააღმდეგ -  
ნაწილი 1: მართვის კლასიფიკაცია, მოთხოვნები და საგამოცდო პროცედურები

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

საქართველოს სტანდარტებისა და მეტროლოგიის  
ეროვნული სააგენტო  
თბილისი

# სსტ ენ 15695-1:2017/2018

## საინფორმაციო მონაცემები

1 დამტკიცებულია და შემოღებულია სამოქმედოდ საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს 2018 წლის 08 ივნისის № 67 და 2018 წლის 7 მარტის № 14 განკარგულებებით

2 მიღებულია თავფურცლის თარგმნის მეთოდით სტანდარტიზაციის ევროპული კომიტეტის სტანდარტი ენ 15695-1:2017 „სასოფლო სამეურნეო ტრაქტორები და თვითკონტროლირებადი მაშხეფები - შემსრულებლის (მძღოლის) დაცვა მავნე შემცველობის წინააღმდეგ - ნაწილი 1: მართვის კლასიფიკაცია, მოთხოვნები და საგამოცდო პროცედურები“

### 3 პირველად

4 რეგისტრირებულია საქართველოს სტანდარტებისა და მეტროლოგიის ეროვნული სააგენტოს რეესტრში: 2018 წლის 08 ივნისი №268-1.3-013820

აკრძალულია ამ სტანდარტის გადაცემა მესამე პირებისათვის ან/და მისი სხვა ფორმით გავრცელება

English Version

Agricultural tractors and self-propelled sprayers -  
Protection of the operator (driver) against hazardous  
substances - Part 1: Cab classification, requirements and  
test procedures

Tracteurs agricoles et pulvérisateurs automoteurs -  
Protection de l'opérateur (conducteur) contre les  
substances dangereuses - Partie 1 : Classification des  
cabines, exigences et méthodes d'essais

Landwirtschaftliche Traktoren und selbstfahrende  
Pflanzenschutzgeräte - Schutz der Bedienungsperson  
(Fahrer) vor gefährlichen Substanzen - Teil 1: Kabinen-  
Klassifizierung, Anforderungen und Prüfverfahren

This European Standard was approved by CEN on 3 July 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

**Contents**

Page

European foreword..... 4

Introduction ..... 5

1 Scope..... 6

2 Normative references..... 6

3 Terms and definitions ..... 6

4 Specification of categories of cabs ..... 7

4.1 Category 1 ..... 7

4.2 Category 2 ..... 7

4.3 Category 3 ..... 7

4.4 Category 4 ..... 7

5 Safety requirements and/or protective/risk reduction measures..... 8

5.1 Filter housing..... 8

5.2 Category 2 ..... 8

5.3 Category 3 ..... 8

5.4 Category 4 ..... 8

5.5 Tightness of the air delivery and filtration system..... 8

5.6 Blockages ..... 9

5.7 Location of air inlet ..... 9

5.8 Cab apertures ..... 9

6 Verification of requirements ..... 9

7 Information for use ..... 10

7.1 Operator's manual ..... 10

7.1.1 General..... 10

7.1.2 Category 1 ..... 11

7.1.3 Category 2 ..... 11

7.1.4 Category 3 ..... 11

7.1.5 Category 4 ..... 12

7.2 Marking..... 12

Annex A (normative) Air delivery system test..... 13

A.1 General..... 13

A.2 General conditions..... 13

A.3 Ambient conditions ..... 13

Annex B (normative) Determination of leakages of air delivery and filtration system installed in the cab..... 14

B.1 General..... 14

B.2 Test equipment..... 14

B.3 Test conditions..... 14

B.4 Test procedure ..... 14

B.5 Test result and acceptance criteria ..... 15

B.6 Test report..... 15

საინფორმაციო ნაწილი. სრული ტექსტის სახსრავად შეიძინეთ სტანდარტი.

<b>Annex C (normative) Determination of isolation effectiveness of air delivery and filtration system installed in the cab .....</b>	<b>17</b>
<b>C.1 Laboratory method using an aerosol .....</b>	<b>17</b>
<b>C.2 Measurement protocol .....</b>	<b>17</b>
<b>C.3 New air flow measurement methods.....</b>	<b>21</b>
<b>C.4 Test report .....</b>	<b>25</b>
<b>Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Machinery Directive 2006/42/EC aimed to be covered .....</b>	<b>28</b>
<b>Bibliography .....</b>	<b>29</b>

## European foreword

This document (EN 15695-1:2017) has been prepared by Technical Committee CEN/TC 144 “Tractors and machinery for agriculture 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 March 2018, and conflicting national standards shall be withdrawn at the latest by March 2018.

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 15695-1:2009.

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(s).

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

The EN 15695 series, Agricultural tractors and self-propelled sprayers – Protection of the operator (driver) against hazardous substances, consists of the following parts:

- Part 1: Cab classification, requirements and test procedures;
- Part 2: Filters, requirements and test procedures.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

საინფორმაციო ნაწილი. სრული ტექსტის სანახავად შეიძინეთ სტანდარტი.

## Introduction

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

This document is of relevance, in particular, for the following stakeholder groups representing the market players with regard to machinery safety:

- machine manufacturers (small, medium and large enterprises);
- health and safety bodies (regulators, accident prevention organizations, market surveillance etc.).

Others can be affected by the level of machinery safety achieved with the means of the document by the above-mentioned stakeholder groups:

- machine users/employers (small, medium and large enterprises);
- machine users/employees (e.g. trade unions, organizations for people with special needs);
- service providers, e.g. for maintenance (small, medium and large enterprises);
- consumers (in case of machinery intended for use by consumers).

The above-mentioned stakeholder groups have been given the possibility to participate in the drafting process of this document.

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

When operating self-propelled sprayers or tractors, the operator can be exposed to hazardous substances such as dust, aerosols or vapours (for example during the application of plant protection products or fertilisers). Cabs of agricultural tractors and self-propelled sprayers providing protection against these substances may be used to reduce operator exposure to air-borne contaminants generated during farming operations.

With regard to the application of plant protection products (PPP) the operator can be exposed to risks:

- before the actual spraying operation (e.g. handling of PPP cans/packages, spray tank filling, sprayer adjustment);
- during the spraying operation (e.g. on the tractor or self-propelled sprayer with/without cab, when working at the sprayer when adjusting the sprayer in the field, removing nozzle blockages, etc.);
- after the spraying operation (e.g. when removing residues, sprayer cleaning, service and maintenance operations).

Protective measures (personal protective equipment (PPE)) are specified on PPP labels today, for example:

- dermal exposure: gloves, overall, apron, headdress (with face protection), protective goggles;
- respiratory exposure: filtering half masks.

The objective of this European Standard is to improve the operator protection by using the protective function of the cab of self-propelled sprayers and tractors in case of mounted or trailed sprayers. For this purpose, this European Standard specifies cab categories, performance requirements, test procedures and the operator information to be provided, in particular with regard to installation, use and maintenance operations.