

CCS B 91



**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB/T 39515.2-2021

**Agricultural and forestry machinery - Environmental
requirements for sprayers - Part 2: Horizontal boom sprayers**

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Foreword

GB/T 39515 "Environmental Requirements for Agricultural and Forestry Machinery Sprayers" is divided into 4 parts.

---Part 1.General requirements;

---Part 2.Horizontal boom sprayer;

---Part 3.Sprayers for shrubs and trees crops;

---Part 4.Stationary and semi-mobile sprayers.

This part is Part 2 of GB/T 39515.

This section was drafted in accordance with the rules given in GB/T 1.1-2009.

The translation method used in this part is equivalent to the adoption of ISO 16119-2.2013 Environmental Requirements for Agricultural and Forestry Machinery Sprayers Part

2.Horizontal Spray

Rod sprayer.

The Chinese documents that have a consistent correspondence with the international documents cited in this section are as follows.

---GB 10395.6-2006 Agricultural and forestry tractors and machinery safety technical requirements Part 6.Plant protection machinery

(ISO 4254-6.1995,MOD)

---GB/T 10610-2009 Product Geometric Technical Specification (GPS) Surface structure profile method to evaluate the rules and rules of surface structure

Method (ISO 4288.1996, IDT)

---GB/T 18675-2002 Determination of total residual liquid volume of agricultural sprayers for plant protection machinery (idtISO 13440.1996)

---GB/T 18678-2002 Plant protection machinery, agricultural sprayer (apparatus), the rated

capacity of the liquid tank and the diameter of the filling hole

(equiv ISO 9357.1990)

---GB/T 20084-2006 Plant protection mechanical sprayer connection thread (ISO 4102.1984, MOD)

---GB/T 20085-2006 Plant Protection Machinery Vocabulary (ISO 5681.1992, MOD)

---GB/T 20183.1-2006 Plant protection machinery spray equipment Part 1.Sprayer nozzle test method

(ISO 5682-1.1996, IDT)

---GB/T 20183.2-2006 Plant protection machinery spray equipment Part 2.Hydraulic sprayer test method

(ISO 5682-2.1997, IDT)

---GB/T 20183.3-2006 Plant protection machinery spray equipment Part 3.Agricultural hydraulic sprayer liquid application per hectare

Regulation system test method (ISO 5682-3.1996, IDT)

---GB/T 24681-2009 Field measurement method for spray drift of plant protection machinery (ISO 22866.2005, IDT)

---GB/T 24684.1-2009 Plant protection machinery evaluation cleaning system test method part 1.sprayer machine

Internal cleaning (ISO 22368-1.2004, IDT)

---GB/T 24684.3-2009 Plant protection machinery evaluation cleaning system test method Part 3.The inside of the chemical tank

Cleaning (ISO 22368-3.2004, IDT)

---GB/T 32241-2015 Laboratory measurement method for spray drift of plant protection machinery Wind tunnel test (ISO 22856.

2008, IDT)

---GB/T 32242.1-2015 Plant protection mechanical inhalation dosing device Part 1.Test method (ISO 21278-1.

2008, MOD)

---GB/T 32242.2-2015 Plant protection mechanical inhalation dosing device Part 2.General requirements and performance limits

(ISO 21278-2.2008,MOD)

This section has made the following editorial changes.

--- Use "MPa" conversion instead of "bar".

This part was proposed by China Machinery Industry Federation.

This part is under the jurisdiction of the National Agricultural Machinery Standardization Technical Committee (SAC/TC201).

Drafting organizations of this section. Hefei DuoJia Agricultural Science and Technology Co., Ltd., Chinese Academy of Agricultural Mechanization Sciences, Shandong Huasheng Agricultural Pharmaceutical Machinery Co., Ltd.

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Introduction

The technical requirements of this part of GB/T 39515 are based on the tests given in ISO 5682-2:1997. This standard is mainly used for hydraulics

Sprayer. For other types of sprayers, other test methods and/or test standards that may be required are this part of GB/T 39515

Subject of future investigation/revision.

This part is a Type C standard specified by ISO 12100.

This section points out the machinery-related hazards, dangerous states, dangerous events and their scope covered.

When the provisions of Type C standards are different from those of Type A or Type B standards as the basis, the provisions of Type C standards take precedence over those of other standards.

It is stipulated that the design and manufacture of machinery and tools shall comply with the provisions of the Class C standard.

Environmental requirements for agricultural and forestry machinery sprayers

Part 2. Horizontal boom sprayer

1 Scope

This part of GB/T 39515 specifies the use of horizontal boom sprayers (see definition in 3.1) (including errors that can be foreseen by the manufacturer).

Use) the technical requirements and verification methods to minimize the potential risk of environmental pollution during the process. This part stipulates the design of various sprayers

Used together with GB/T 39515.1 of general performance requirements. If the requirements

specified in this part are not consistent with those specified in GB/T 39515.1

At the same time, sprayers belonging to the scope of this section have priority to follow the provisions of this section. This section does not contain safety aspects, safety aspects

See ISO 4254-6 for requirements.

This section does not apply to sprayers manufactured before the release date.

2 Normative references

The following documents are indispensable for the application of this document. For dated reference documents, only the dated version applies to this article

Pieces. For undated reference documents, the latest version (including all amendments) is applicable to this document.

GB/T 24682.2-2015 Drift classification of plant protection mechanical sprayer Part 2.Field measurement of field crop sprayer

Classification (ISO 22369-2:2010, IDT)

GB/T 39515.1-2020 Environmental requirements for agricultural and forestry machinery sprayers Part 1.General requirements (ISO 16119-1:2013, IDT)

ISO 4102 Plant protection mechanical sprayer connection thread (Equipmentforcropprotection-Sprayers-Connectionthreading)

ISO 4254-6:2009 Safety of Agricultural Machinery Part 6.Sprayers and Liquid Fertilizers (Agriculturalmachinery-Safety-Part 6.Sprayersandliquidfertilizerdistributors)

ISO 4288 Product Geometric Technical Specification (GPS) Surface Structure Profile Method. Rules and Methods for Evaluating Surface Structure (GeometricalProductSpecifications(GPS)-Surfacetexture.Profilemethod-Rulesandprocedures fortheassessmentofsurfacetexture)

ISO 5681 Plant Protection Machinery Vocabulary (Equipmentforcropprotection-Vocabulary)

ISO 5682-1 Plant protection machinery spray equipment Part 1.Sprayer nozzle test method (Equipmentforcropprotection-Sprayingequipment-Part 1.Testmethodsforsprayernozzles)