

ICS 65.060.01

CCS B90



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

GB 10395.6-2006

**Tractors and machinery for agriculture and forestry - Technical
means for ensuring safety - Part 6: Equipment for crop
protection**

农林拖拉机和机械 安全技术要求 第6部分：植物保护机械

(English Translation)

Issued on: March 29, 2006

Implemented on: November 1, 2006

**Issued by: General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China;
Standardization Administration of China**

Table of Contents

Foreword...	3
1 Scope...	6
2 Normative references...	6
3 Terms and definitions...	7
4 Technical requirements...	7

Foreword

4.1.1, 4.2.2, 4.2.6, Clause 5 and Clause 7 of this Part are recommended and the rest is mandatory.

GB 10395 "Tractors and machinery for agriculture and forestry - Technical means for ensuring safety" consists of the following parts.

- Part 1. General;
- Part 3. Tractors;
- Part 5. Power-driven soil-working machines;
- Part 6. Equipment for crop protection;
- Part 7. Combine harvesters, forage and cotton harvesters;
- Part 8. Irrigation pumps and machines;
- Part 9. Equipment for sowing, planting and distributing fertilizer;
- Part 10. Walk-behind powered rotary tillers;
- Part 11. Powered lawn trimmers;
- Part 12. Portable powered hedge-trimmers;
- Part 13. Powered walk-behind and hand-held lawn trimmers and lawn edge trimmers;
- Part 14. Powered shredders and chippers;
- Part 15. Powered edgers with rigid cutting means.

This Part is Part 6 of the GB 10395 "Tractors and machinery for agriculture and forestry

- Technical means for ensuring safety".

This Part revises and adopts ISO 4254-6:1995 "Tractors and machinery for agriculture and forestry - Technical means for ensuring safety - Part 6. Equipment for crop protection" (English version).

This Part is redrafted according to ISO 4254-6:1995.

Taking into account China's national conditions, when using ISO 4254-6:1995, the following modifications are made.

Tractors and machinery for agriculture and forestry -
Technical means for ensuring safety -
Part 6. Equipment for crop protection

1 Scope

This Part of GB 10395 specifies the safety requirements for power operated and manually operated equipment for crop protection and liquid fertilizer applicators.

The requirements specified in this Part of GB 10395 are a supplement to GB 10395.

1.

2 Normative references

The following standards contain provisions which, through reference in this Part of GB 10395, constitute provisions of this Part. For dated reference, subsequent amendments to (excluding corrections to), or revisions of, any of these publications do not apply. However, the parties to agreements based on this Part are encouraged to investigate the possibility of applying the most recent editions of the standards. For undated references, the latest edition of the normative document referred to applies.

GB/T 9480-2001 Tractors machinery for agriculture and forestry powered lawn and garden equipment - Operator's manuals - Content and presentation (eqv ISO 3600:1996)

GB 10395.1-2001 Tractors and machinery for agriculture and forestry - Technical means for ensuring safety - Part 1. General (eqv ISO 4254-1:1989)

GB 10396-2006 Tractors, machinery for agriculture and forestry, powered lawn and garden equipment - Safety signs and hazard pictorials - General principles (ISO

11684.1995, MOD)

GB/T 18678-2002 Equipment for crop protection - Agriculture spray - Nominal capacity of spray tank and diameter of filling (eqv ISO 9357.1990)

GB/T 20084-2006 Equipment for crop protection - Vocabulary (ISO 5681.1992, MOD)

4.2.1 Make sure that the liquid tank lid does not occur accidental loosening or opening.

The liquid discharged from the liquid tank shall always be under the operator's control. When the operator fills the liquid tank, it shall be able to directly see the liquid level indication or the liquid level position.

4.2.2 The rated capacity and the diameter of the filling hole of liquid tanks shall comply

with GB/T 18678.

4.2.3 A filter shall be set at the filling hole. For compression sprayers that the filter can

not be set due to structural restrictions, it shall ensure that there are at least two grades of filtrations.

4.2.4 Liquid tanks bearing pressure shall be set a device making the pressure drop to

a safe pressure value in the event of failure.

4.2.5 Liquid tanks shall be capable of being conveniently and safely drained without

using tools and contaminating the operator.

4.2.6 Sprayers of liquid tanks with a rated capacity greater than 800 L shall be equipped with a device for adding chemical liquids (such as pesticides) so that the chemical liquids do not need to be filled manually through the filling hole of liquid tanks.

4.2.7 The tightness of backpack sprayer's liquid tank assembly shall meet the following

requirements. after maintaining for 1 min at the pressure of 0.01 MPa, the liquid tank assembly shall be no leakage.

4.2.8 Liquid tanks of sprayers shall not leak and rupture after 3 consecutive fall tests.

The temperature of the water during the fall test shall be kept within $20\text{ }^{\circ}\text{C} \pm 5\text{ }^{\circ}\text{C}$. The board is flat and hard and is a square with a side length of 0.9 m and a thickness of 0.05 m.

a) Backpack sprayers. REMOVE the spray parts, air chamber, the lower and upper fixture rings of the liquid tank and other parts; BLOCK the outlet. FILL the liquid tank with a rated capacity of water; PUT the bottom of the tank downward horizontally; MAKE it fall freely from a height of $1\text{ m} \pm 0.05\text{ m}$ on the board.

b) Compression sprayers. REMOVE parts such as spray parts, straps; INSTALL a tee at the outlet to inflate and measure the pressure in the liquid tank. FILL the liquid tank with a rated capacity of water and inflate to the upper limit of working pressure; PUT the bottom of the tank downward horizontally; MAKE it fall freely from a height of $0.6\text{ m} \pm 0.05\text{ m}$ on the board.

NOTE: Appropriate safety measures shall be taken during the test.

4.3 Pressure indicator

chamber is 3 times the maximum working pressure.

4.5 Spray rod and auxiliary device

For filters and all parts contacting with the liquid, the structure shall be such that the liquid residue is of the least amount, and can be cleaned and drained.

For sprayers with spray rods, it shall not be dangerous for personnel to carry out the spray operation when folding the spray rod, and shall not create a practical obstacle to the operator's seat or prevent the operator from approaching the filling hole or any other positions.