



BSI Standards Publication

Equipment for crop protection — Knapsack sprayers

Part 1: Safety and environmental requirements

National foreword

This British Standard is the UK implementation of EN ISO 19932-1:2025. It is identical to ISO 19932-1:2025. It supersedes BS EN ISO 19932-1:2013, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee AGE/15, Equipment for crop protection and application of liquid fertilizer.

A list of organizations represented on this committee can be obtained on request to its committee manager.

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This European Standard was approved by CEN on 29 June 2025.

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COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN ISO 19932-1:2025) has been prepared by Technical Committee ISO/TC 23 "Tractors and machinery for agriculture and forestry" in collaboration with 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of an identical text or by endorsement, at the latest by February 2026, and conflicting national standards shall be withdrawn at the latest by February 2026.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 19932-1:2013.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

For the relationship with EU Legislation, see informative Annex ZA, which is an integral part of this document.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

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The text of ISO 19932-1:2025 has been approved by CEN as EN ISO 19932-1:2025 without any modification.

Annex ZA (informative)

Relationship between this European Standard and the Essential Requirements of EU Directive 2006/42/EC amended by Directive 2009/127/EC aimed to be covered

This European Standard has been prepared under a Commission's standardization request "M/396 Mandate to CEN and CENELEC for Standardisation in the field of machinery" and "M/471 Mandate to CEN for standardisation in the field of machinery for pesticide application" to provide one voluntary means of conforming to essential requirements of Directive 2006/42/EC of the European Parliament and of the Council of 17 May 2006 on machinery, and amending Directive 2009/127/EC.

Once this standard is cited in the Official Journal of the European Union under that Directive, compliance with the normative clauses of this standard given in [Table ZA.1](#) confers, within the limits of the scope of this standard, a presumption of conformity with the corresponding essential requirements of that Directive, and associated EFTA regulations.

Table ZA.1 — Correspondence between this European Standard and Annex I of Directive 2006/42/EC amended by Directive 2009/127/EC

The relevant Essential Requirements of Directive 2006/42/EC amended by Directive 2009/127/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1. ESSENTIAL HEALTH AND SAFETY REQUIREMENTS		
1.1.2. (a)	4 , 5 , 6 , 7 , 8	
1.1.2. (c)	4 , 5 , 6 , 7 , 8	
1.1.2. (d)	4 , 8	
1.1.2. (e)	4 , 7 , 8	
1.1.3. Materials and products	8.1.1 .	
1.1.5. Design of machinery to facilitate its handling	4.1.5 .	
1.1.6. Ergonomics	4.1.1 , 4.1.2 , 4.1.4 , 4.1.12, 4.2.1 , 4.2.3 , 4.2.4 , 4.4.1 , 4.4.2 , 4.5.1 , 6.2.5 , 6.10 , 6.11 , 7.2 .	
1.2. CONTROL SYSTEMS		
1.2.1. Safety and reliability of control systems	4.5.1 , 4.5.3 , 4.5.4, 4.5.5, 4.5.6.	
1.2.2. Control devices	4.4 , 6.3 .	
1.2.3. Starting	4.4.2 .	

The relevant Essential Requirements of Directive 2006/42/EC amended by Directive 2009/127/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
1.2.4. Stopping	4.4.2 , 6.3	
1.2.4.1. Normal stop	4.4.2 , 6.3	
1.2.4.2. Operational stop	4.4.2 , 6.3	
1.2.4.3. Emergency stop		Not covered
1.2.4.4. Assembly of machinery	8.1.1 .	
1.2.5. Selection of control or operating modes		Not covered
1.2.6. Failure of the power supply		Not covered
1.3. PROTECTION AGAINST MECHANICAL HAZARDS		
1.3.1. Risk of loss of stability	4.1.6 .	
1.3.2. Risk of break-up during operation		Not covered
1.3.3. Risks due to falling or ejected objects	4.2.5 , 5.1.1 , 7.1.1 .	
1.3.4. Risks due to surfaces, edges or angles	4.1.11	
1.3.7. Risks related to moving parts	6.4 .	
1.4. REQUIRED CHARACTERISTICS OF GUARDS AND PROTECTIVE DEVICES		
1.4.1. General requirements	6.3 , 6.4 .	
1.4.2.1. Fixed guards	6.4 .	
1.4.2.2. Interlocking movable guards		Not covered
1.4.2.3. Adjustable guards restricting access		Not covered
1.4.3. Special requirements for protective devices		Not covered
1.5. RISKS DUE TO OTHER HAZARDS		
1.5.1. Electricity supply	6.8 , 6.11	
1.5.3. Energy supply other than electricity	6.5	
1.5.5. Extreme temperatures	6.6 .	

The relevant Essential Requirements of Directive 2006/42/EC amended by Directive 2009/127/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
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1.5.9. Vibrations	6.10	
1.5.13. Emissions of hazardous materials and substances	4.1.6 , 4.1.7 , 4.1.9 , 4.1.10 , 4.7 , 5.1.2 , 6.1.1 , 6.3 , 6.5.3 , 7.1.2 , 7.3.3 .	
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The relevant Essential Requirements of Directive 2006/42/EC amended by Directive 2009/127/EC	Clause(s)/sub-clause(s) of this EN	Remarks/Notes
2.4.5.3. Tests		Not covered
2.4.5.4. Losses during stoppage	4.1.7	
2.4.6. Maintenance	8.1.1	
2.4.6.1. Cleaning	8.1.1	
2.4.6.2. Servicing	8.1.1	
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2.4.8. Marking of nozzles, strainers and filters	4.6.1 , 4.7.4 .	
2.4.10. Instructions	8.1 .	

WARNING 1 Presumption of conformity stays valid only as long as a reference to this European Standard is maintained in the list published in the Official Journal of the European Union. Users of this standard should consult frequently the latest list published in the Official Journal of the European Union.

WARNING 2 Other Union legislation may be applicable to the product(s) falling within the scope of this standard.

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