
Agricultural sprayers — Recording of spray drift parameters

*Pulvérisateurs agricoles — Enregistrement des paramètres de la
dérive de pulvérisation*





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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The risk of spray drift outside the area being sprayed is one of the potential risks to the environment occurring due to the application of plant protection products (PPPs). To protect sensitive non-target areas, such as water courses, the use of application techniques and equipment that can reduce the risk of spray drift has been promoted. Many new drift reduction technologies (DRTs) have been developed and introduced to reduce the risk of spray drift, with ISO Standards having been developed for drift measurement and classification of drift reduction potential for mobile field and bush and tree crop sprayers.

Some countries/authorities have introduced legislation/regulation regarding use of some DRTs for field and bush and tree crop sprayers. Typically, this includes approved operational parameters for the DRT (for example spray pressure, forward speed, boom height, level of air assistance, etc.) and/or acceptable conditions during the spraying operation (for example wind speed and direction) to achieve the intended drift reduction. If not operated within the correct parameters and/or in acceptable conditions during the spray operation, then this non-compliance can result in failure to achieve the intended drift reduction.

Some countries/authorities wish to have the ability to check, during spraying operations, for compliance with the approved operational parameters of the DRT to ensure that the expected spray drift reduction will be achieved. For real time in field checking of spray operations by inspectors, minimum requirements for electronic recording of certain spray parameters relevant to the risk of spray drift are required. Certain key operational parameters that can be recorded electronically can give an easy and immediate indication regarding compliance of the use of the DRT with the relevant approved operational parameters. The intention of this document is to deal with the recording of certain key operational parameters during the spraying operation, together with the requirements for display and storage of the data. Many other operational parameters, and of course the conditions during the spraying operation, can also affect the level of spray drift but are not covered in this document.

For countries/authorities wishing to undertake such in field inspection schemes, this document can offer the following benefits:

- a) it serves as a reference for regulators and legislators on data requirements;
- b) it provides more certainty for sprayer manufacturers with respect to sensors, software and data storage requirements; and
- c) it helps farmers/end users demonstrate to the public and other stakeholders, as well as authorities, that DRTs are being used properly to reduce the risk of spray drift.