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**Petroleum products — Determination  
of the water reaction of aviation fuels**

*Produits pétroliers — Détermination de la réaction à l'eau des carburants  
aviation*



## 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 6250 was prepared by Technical Committee ISO/TC 28, *Petroleum products*.

This second edition cancels and replaces the first edition (ISO 6250:1982), which has been technically revised.

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# Petroleum products — Determination of the water reaction of aviation fuels

**WARNING** — The use of this International Standard may involve hazardous materials, operations and equipment. This International Standard does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this International Standard to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

## 1 Scope

This International Standard specifies a method for the determination of the presence of water-miscible components in aviation fuels, and the effect of these components on volume change, the condition of the fuel-water interface and their tendency to form emulsions.

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards listed below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3170:1988, *Petroleum liquids — Manual sampling*.

ISO 3171:1988, *Petroleum liquids — Automatic pipeline sampling*.

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods*.

## 3 Principle

A test portion of the fuel is shaken, using a standardized technique, at room temperature, in scrupulously clean glassware with a phosphate buffer solution. The change in volume of the aqueous layer when testing aviation gasoline, the appearance of the interface and the degree of separation of the two phases for all aviation fuels, are reported as the water reaction of the fuel.

## 4 Reagents and materials

For the analysis described in this International Standard, use only reagents of recognized analytical grade, and water complying with the requirements of Grade 3 of ISO 3696.