
**Petroleum products — Determination
of the freezing point of aviation fuels**

*Produits pétroliers — Détermination du point de disparition des cristaux
des carburants aviation*



Foreword

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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 3013 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*.

This second edition cancels and replaces the first edition (ISO 3013:1974), which has been technically revised, in particular with the inclusion of annex A.

Annex A forms an integral part of this International Standard.

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International Organization for Standardization
Case postale 56 • CH-1211 Genève 20 • Switzerland
Internet central@iso.ch
X.400 c=ch; a=400net; p=iso; o=isocs; s=central

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1 Scope

This International Standard specifies a procedure for determining the temperature below which solid hydrocarbon crystals are present in aviation turbine fuels or aviation gasolines.

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*.

3 Definitions

For the purposes of this International Standard the following definitions apply:

3.1 freezing point: The temperature at which solid hydrocarbon crystals, formed on cooling, disappear when the temperature of the test sample is allowed to rise.

3.2 crystallization point: The temperature at which crystals of hydrocarbons first appear when the test sample is cooled.

4 Principle

The sample tube, containing the test sample, a stirrer, collar and thermometer, is placed in a vacuum flask containing a coolant. During the cooling cycle the test sample is stirred vigorously and examined for the formation of