INTERNATIONAL STANDARD

ISO 13736

Fourth edition
2021-03

AMENDMENT 1
2022-08

Determination of flash point — Abel closed-cup method

AMENDMENT 1: Bias statement update

Détermination du point d'éclair — Méthode Abel en vase clos

AMENDEMENT 1: Révision de l'énoncé de biais

Reference number
ISO 13736:2021/Amd.1:2022(E)

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

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.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 19, *Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

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.

Determination of flash point — Abel closed-cup method

AMENDMENT 1: Bias statement update

13.1

Replace the second and third paragraph:

A comparison of precision values between manual apparatus, automated apparatus with gas ignition, and automated apparatus with electric ignition indicated that there was no real difference between the reproducibility estimates. However, repeatability for automated apparatus with electric ignition was found to be slightly greater than in Formula (2). For practical purposes, this difference shall be ignored as it is significantly less than the repeatability of the method.

The evaluation of the degree of agreement between the different apparatus types was performed in accordance with ASTM D6708[14]. No relative bias was found between automated apparatus using gas ignition sources and that using electric ignition sources. However, a small relative bias was evident between manual and automated. For practical purposes this relative bias shall be ignored as it is significantly less than the repeatability of the method.

with:

The interlaboratory test analysis concluded that a single repeatability and a single reproducibility are appropriate to be used for manual and automated (gas and electric ignitors) apparatus; an F-Test at 95 % confidence confirmed that there is no statistically significant difference in precision between the manual and automated apparatus.

Bibliography

Delete the following reference and renumber the others accordingly in the text and the Bibliography:

[14] ASTM D6708-08, *Standard Practice for Statistical Assessment and Improvement of Expected Agreement Between Two Test Methods that Purport to Measure the Same Property of a Material*