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Petroleum products and other liquids — Guidance for flash point and combustibility testing

Produits pétroliers et autres liquides — Lignes directrices pour les essais de combustibilité et de point d'éclair



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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.

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).

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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*.

This second edition cancels and replaces the first edition (ISO 29662:2009). The main technical changes compared to the previous edition are as follows:

- the title has been changed;
- combustibility test details have been further added;
- a list of examples of regulations have been added;
- test samples, to include biodiesel, mixtures and samples that form a skin during testing have been added;
- the use of low hazard glass thermometers has been added;
- further details regarding the requirements for barometric corrections have been added;
- [Annex A](#) has been added to include temperature ranges for each test method.

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

This document was written to assist laboratory managers and technicians, regulators, specification writers and industry in the use, specification and application of flash point and combustibility tests for liquids and semi-solids.

The flash point test can be summarised as a procedure where a test portion is introduced into a temperature-controlled test cup and an ignition source is applied to the vapours produced by the test portion to determine if the vapour / air mixture is flammable or at what temperature the vapour / air mixture is flammable.

Combustibility tests in this document comprise fire point, sustained combustibility and sustained burning tests. These tests can be summarised as a procedure where a test portion is introduced into a temperature-controlled test cup and an ignition source is applied to the vapours produced by the test portion to determine if the vapour / air mixture catches fire and continues to burn.

This document was developed by the Joint ISO/TC 28 - ISO/TC 35 WG9 on flash point methods.