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Phone: +41 22 749 01 11

Email: copyright@iso.org

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Foreword

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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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This document was prepared by Technical Committee ISO/~~TC28~~TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*, Subcommittee ~~SC2~~SC 2, *Measurement of Petroleum & Related Products*, ~~petroleum and related products~~, 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)*.

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This second edition cancels and replaces the first edition (ISO 12185:1996), which has been technically revised. ~~The main changes compared to the previous edition are as follows:~~It also incorporates the *Technical Corrigendum ISO 12185:1996/Cor 1:2001*.

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— ~~The document has been extensively revised to improve clarity of the text.~~

— ~~Definition of~~The main changes are as follows:

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— definitions have been added in Clause 3;

— a quality control adjustment, calibration, verification, etc. has been added along with the latest ISO definition.

— Quality Control (QC) check has also been added along with the latest ASTM standard in 9.5.

The committee responsible for this document is ISO/TC 28/SC2/WG12.

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Introduction

The first edition of this standard, (ISO 12185:1996) was written at a time when there were relatively few models of density meter with an oscillating U-tube sensor on the market.

There are now a considerable number of different manufacturers and models of laboratory density meter available worldwide, and many of which use different methodologies or algorithms to cope with the effect of viscosity on displayed density.

This document ~~has tried to encompass this~~ therefore encompasses a wider range of instruments than those covered in the first edition and gives guidance and requirements for accurate density analyses, such as apparatus and apparatus preparation (Clause see Clauses 5, and 9, Annex A).

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