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~~Secretariat: NEN~~

Petroleum and related products from natural or synthetic sources — Determination of pour point — Part 1: Automated step-wise cooling method

Produits pétroliers et ~~dérivés~~ ~~connexes d'origine naturelle ou synthétique~~ - Détermination du point d'écoulement — Partie 1: Méthode automatisée par refroidissement par paliers

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Foreword

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This document was prepared by Technical Committee ISO/TC 28, *Petroleum and related products, fuels and lubricants from natural or synthetic sources*.

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Introduction

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This document describes the determination of pour point by automated instruments that ~~mimic the manual mirrors~~ ISO 3016 ~~11~~ (which comprises a manual procedure only). This document is based on the techniques used in the instruments available on the market in 2021.

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This test method ~~doesn't~~ **does not** contain any precision at this stage. As this is a newly described technique, also no immediate precision or interim repeatability can be given. ~~At the time of publication, an~~ interlaboratory study is ~~on-going at the moment of publication of this document. The ongoing, the~~ results ~~thereof of which~~ will be ~~assessed by ISO/TC 28/WG 27 before this document can be revised~~ taken into a full ~~International Standard~~ account in future standardization activities.

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Petroleum and related products from natural or synthetic sources — Determination of pour point — Part 1: Automated step-wise cooling method

WARNING — The use of this document can involve hazardous materials, operations and equipment. This document does not purport to address all of the safety problems associated with its use. It is the responsibility of the users of this document to take appropriate measures to ensure the safety and health of personnel prior to the application of this document, and to determine the applicability of any other restrictions.

1 Scope

This document specifies a method for ~~the determination of determining~~ the pour point of petroleum products by means of automated equipment ~~for detecting, in which~~ movement of the test specimen is ~~detected~~ using a step-wise cooling technique.

A separate procedure suitable for the determination of the lower pour point of fuel oils, heavy lubricant base stock, and products containing residual fuel components is also described.

The procedure described in this document is not suitable for crude oils.

Test results from this method are determined in 3 °C testing intervals.

NOTE Some equipment ~~can also generate~~ generate results at 1 °C testing intervals, which is an acceptable alternative procedure, but for which precision and bias have not been determined.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 3170, *Petroleum liquids* — Manual sampling

ISO 3171, *Petroleum liquids* — Automatic pipeline sampling

ISO 17034, General requirements for the competence of reference material producers

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain ~~terminological~~ terminology databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <https://www.iso.org/obp>

— IEC Electropedia: available at <https://www.electropedia.org/>

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