

STN	Ropa a príbuzné výrobky. Stanovenie starnutia olejov a kvapalín s prídavkom inhibítora. Skúška TOST. Časť 3: Bezvodý postup pre syntetické hydraulické kvapaliny (ISO 4263-3: 2015).	STN EN ISO 4263-3
		65 6613

Petroleum and related products - Determination of the ageing behaviour of inhibited oils and fluids using the TOST test - Part 3: Anhydrous procedure for synthetic hydraulic fluids (ISO 4263-3:2015)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/16

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English Version

Petroleum and related products - Determination of the ageing behaviour of inhibited oils and fluids using the TOST test - Part 3: Anhydrous procedure for synthetic hydraulic fluids (ISO 4263-3:2015)

Pétrole et produits connexes - Détermination du comportement au vieillissement des fluides et huiles inhibés au moyen de l'essai TOST - Partie 3: Méthode anhydre pour les fluides hydrauliques synthétiques (ISO 4263-3:2015)

Mineralölerzeugnisse und verwandte Produkte - Bestimmung des Alterungsverhaltens von inhibierten Ölen und Flüssigkeiten unter Anwendung des TOST-Verfahrens - Teil 3: Wasserfreies Verfahren für synthetische Druckflüssigkeiten (ISO 4263-3:2015)

This European Standard was approved by CEN on 24 October 2015.

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European foreword

This document (EN ISO 4263-3:2015) has been prepared by Technical Committee ISO/TC 28 "Petroleum products and lubricants" in collaboration Technical Committee CEN/TC 19 "Gaseous and liquid fuels, lubricants and related products of petroleum, synthetic and biological origin" the secretariat of which is held by NEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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Endorsement notice

The text of ISO 4263-3:2015 has been approved by CEN as EN ISO 4263-3:2015 without any modification.

**Petroleum and related products —
Determination of the ageing
behaviour of inhibited oils and fluids
using the TOST test —**

**Part 3:
Anhydrous procedure for synthetic
hydraulic fluids**

*Pétrole et produits connexes — Détermination du comportement au
vieillessement des fluides et huiles inhibés au moyen de l'essai TOST —
Partie 3: Méthode anhydre pour les fluides hydrauliques synthétiques*





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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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#)

The committee responsible for this document is ISO/TC 28, *Petroleum products and related products of synthetic or biological origin*.

This third edition cancels and replaces the second edition (ISO 4263-3:2010). The main change is the revision of the calculation in [Clause 9](#) to include calculations for both a test oil reaching a TAN of 2,0 mg KOH per gram and for a test oil reaching an increase of TAN of 2,0 mg KOH per gram. In addition, the inclusion of HETG and exclusion of HFDR from the scope have been adopted.

ISO 4263 consists of the following parts, under the general title *Petroleum and related products — Determination of the ageing behaviour of inhibited oils and fluids using the TOST test*:

- *Part 1: Procedure for mineral oils*
- *Part 2: Procedure for category HFC hydraulic fluids*
- *Part 3: Anhydrous procedure for synthetic hydraulic fluids*
- *Part 4: Procedure for industrial gear oils*

NOTE As of the date of publication of this part of ISO 4263, the titles of parts 1, 2 and 4 started with *Petroleum and related products – Determination of the ageing behaviour of inhibited oils and fluids — TOST test*.

Petroleum and related products — Determination of the ageing behaviour of inhibited oils and fluids using the TOST test —

Part 3: Anhydrous procedure for synthetic hydraulic fluids

WARNING — The use of this part of ISO 4263 can involve hazardous materials, operations and equipment. This part of ISO 4263 does not purport to address all of the safety problems associated with its use. It is the responsibility of the user of this part of ISO 4263 to establish appropriate safety and health practices and determine the applicability of regulatory limitations prior to use.

1 Scope

This part of ISO 4263 specifies a method for the determination of the ageing behaviour of synthetic hydraulic fluids of categories HFDU, HEES, HEPG and HETG as defined, for example, in ISO 12922[1] and ISO 15380[2]. The ageing is accelerated by the presence of oxygen and metal catalysts at elevated temperature, and the degradation of the fluid is followed by changes in acid number. Other parts of ISO 4263 specify similar procedures for the determination of ageing behaviour of mineral oils and specified categories of fire-resistant fluids used in hydraulic and other applications.

NOTE Other signs of fluid deterioration, such as the formation of insoluble sludge, catalyst coil corrosion or change in viscosity, can occur which indicate oxidation of the fluid, but are not reflected in the calculated oxidation lifetime. The correlation of these occurrences with field service is under investigation. This test method may be used to compare the oxidation stability of fluids that are not prone to contamination with water. However, because of the large number of individual field-service applications, the correlation between the results of this test and actual service performance can vary markedly, and is best judged on experience. The precision of this test method for synthetic hydraulic fluids is not known because interlaboratory data are not available. This method might not be suitable for use in specifications or in the event of disputed results as long as these data are not available.

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 3696:1987, *Water for analytical laboratory use — Specification and test methods*

ISO 7537, *Petroleum products — Determination of acid number — Semi-micro colour-indicator titration method*

EN 10130:2007, *Cold rolled low carbon steel flat products for cold forming — Technical delivery conditions*

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