



SLOVENSKI STANDARD
SIST EN ISO 20844:2004

01-september-2004

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Petroleum and related products - Determination of the shear stability of polymer-containing oils using a diesel injector nozzle (ISO 20844:2004)

Mineralölerzeugnisse und verwandte Produkte - Bestimmung der Scherstabilität von polymerhaltigen Ölen mit Hilfe einer Diesel-Einspritzdüse (ISO 20844:2004)

Pétrole et produits connexes - Détermination de la stabilité au cisaillement de fluides contenant des polymères au moyen d'un injecteur pour moteur diesel (ISO 20844:2004)

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Ta slovenski standard je istoveten z: EN ISO 20844:2004

ICS:

75.080 Naftni proizvodi na splošno Petroleum products in general

SIST EN ISO 20844:2004

en

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 20844

March 2004

ICS 75.080

English version

Petroleum and related products - Determination of the shear stability of polymer-containing oils using a diesel injector nozzle (ISO 20844:2004)

Pétrole et produits connexes - Détermination de la stabilité au cisaillement de fluides contenant des polymères au moyen d'un injecteur pour moteur diesel (ISO 20844:2004)

Mineralölerzeugnisse und verwandte Produkte - Bestimmung der Scherstabilität von polymerhaltigen Ölen mit Hilfe einer Diesel-Einspritzdüse (ISO 20844:2004)

This European Standard was approved by CEN on 1 March 2004.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: rue de Stassart, 36 B-1050 Brussels

EN ISO 20844:2004 (E)**Foreword**

This document (EN ISO 20844:2004) has been prepared by Technical Committee ISO/TC 28 "Petroleum products and lubricants" in collaboration with Technical Committee CEN/TC 19 "Petroleum products, lubricants and related products", 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 September 2004, and conflicting national standards shall be withdrawn at the latest by September 2004.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

Endorsement notice

The text of ISO 20844:2004 has been approved by CEN as EN ISO 20844:2004 without any modifications.

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INTERNATIONAL STANDARD

ISO
20844

First edition
2004-03-15

Petroleum and related products — Determination of the shear stability of polymer-containing oils using a diesel injector nozzle

*Pétrole et produits connexes — Détermination de la stabilité au
cisaillement de fluides contenant des polymères au moyen d'un
injecteur pour moteur diesel*

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Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 20844 was prepared by Technical Committee ISO/TC 28, *Petroleum products and lubricants*.

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Petroleum and related products — Determination of the shear stability of polymer-containing oils using a diesel injector nozzle

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

1 Scope

This International Standard specifies a method to assess the resistance to shear stresses applied to mineral oils, synthetic oils and other fluids containing polymers, when passed through a specified diesel injector nozzle. The shear stability is measured by the change in viscosity of the fluid under test, brought about by the polymer degradation during stress. Under normal circumstances, this International Standard is applied to hydraulic fluids of categories HR and HV as defined in ISO 6743-4 ([1] in the Bibliography) and specified in ISO 11158 ([2] in the Bibliography), but it may also be applied to fire-resistant hydraulic fluids within categories HFA, HFB, HFC and HFD, with modified conditions as specified in ISO 12922 ([3] in the Bibliography).

No formal correlation has been established between the viscosity loss, or the absence of viscosity loss, obtained using the procedures described in this International Standard and that of oils and fluids in actual service. However, it provides standardized conditions for the evaluation of polymer stability under minimized thermal and oxidative stresses. It is normally used by manufacturers of fluids and additives, and users, as a means of ranking existing and potential formulations.

NOTE Changes to properties other than viscosity are specified in some specifications, but these are not covered by the procedures specified in this International Standard.

2 Normative references

The following referenced documents are indispensable for the application 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 3104:1994, *Petroleum products — Transparent and opaque liquids — Determination of kinematic viscosity and calculation of dynamic viscosity*

ISO 3170:2004, *Petroleum liquids — Manual sampling*

3 Terms and definitions

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