



BSI Standards Publication

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

National foreword

This British Standard is the UK implementation of EN ISO 20844:2015. It is identical to ISO 20844:2015. It supersedes BS EN ISO 20844:2004, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee MCE/18/-/16, Hydraulic fluids.

A list of organizations represented on this committee can be obtained on request to its secretary.

The UK committee draws the reader's attention to the omission of references to reagents in the text and an error in Figure A.1, detailed in Annex A, where Item 17 in the Key to the diagram should read: 'Atomization chamber drain tube'.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2017
Published by BSI Standards Limited 2017

ISBN 978 0 580 84329 7

ICS 75.080

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2017.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

English Version

**Petroleum and related products - Determination of the
shear stability of polymer-containing oils using a diesel
injector nozzle (ISO 20844:2015)**

Pétrole et produits connexes - Détermination de la
stabilité au cisaillement de fluides contenant des
polymères au moyen d'un injecteur pour moteur diesel
(ISO 20844:2015)

Mineralölerzeugnisse und verwandte Produkte -
Bestimmung der Scherstabilität von polymerhaltigen
Ölen mit Hilfe einer Diesel-Einspritzdüse (ISO
20844:2015)

This European Standard was approved by CEN on 22 August 2015.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

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



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	3

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	2
5 Reagents and materials	2
6 Apparatus	2
6.1 Test rig	2
6.2 Viscosity measuring apparatus	2
7 Samples and sampling	2
8 Preparation of test rig	3
9 Referencing	4
10 Procedure	4
11 Calculation	5
12 Expression of results	5
13 Precision	5
13.1 General	5
13.2 Repeatability	5
13.3 Reproducibility	6
14 Test report	6
Annex A (normative) Test rig	7
Bibliography	10

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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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*.

ISO Technical Committee ISO/TC 28 acknowledges permission granted by Co-ordinating European Council to reproduce selected parts of CEC Test Method L-14-93.

This second edition cancels and replaces the first edition (ISO 20844:2004), which has been technically revised with the following changes:

- correction of deficiencies of the former standard and alignment with CEC L-14-93 have been introduced;
- the requirements concerning reagents ([Clause 5](#)) has been updated as the former reference fluid is no longer available;
- a requirement on minimum test volume availability ([7.2](#)) has been introduced based on field experience;
- the preparation of the test rig ([Clause 8](#) and [Annex A](#)) and subsequently the referencing ([Clause 9](#)) have been improved and technically revised.