

INTERNATIONAL
STANDARD

ISO
22286

First edition
2018-11

**Petroleum products and lubricants -
Determination of the dropping point
of grease with an automatic apparatus**

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

[ISO 22286:2018](https://standards.itih.ai/catalog/standards/iso/34de480e-231f-4d03-9293-c5b79fa05d67/iso-22286-2018)

<https://standards.itih.ai/catalog/standards/iso/34de480e-231f-4d03-9293-c5b79fa05d67/iso-22286-2018>



Reference number
ISO 22286:2018(E)

© ISO 2018

iTeh Standards
(<https://standards.iteh.ai>)
Document Preview

[ISO 22286:2018](https://standards.iteh.ai/catalog/standards/iso/34de480e-231f-4d03-9293-c5b79fa05d67/iso-22286-2018)

<https://standards.iteh.ai/catalog/standards/iso/34de480e-231f-4d03-9293-c5b79fa05d67/iso-22286-2018>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2018

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Fax: +41 22 749 09 47
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Sampling	1
5 Principle	1
6 Significance and use	2
7 Apparatus	2
8 Test procedure	2
8.1 Selection of the cup.....	2
8.2 Filling of the cup.....	2
8.3 Adjusting the apparatus.....	3
8.4 Dropping point determination.....	3
9 Expression of the results	3
10 Precision	3
10.1 General.....	3
10.2 Repeatability.....	3
10.3 Reproducibility.....	3
11 Test report	4
Annex A (normative) Cup and cup plug gauge	5
Bibliography	7

[ISO 22286:2018](https://standards.itech.ai)

<https://standards.itech.ai/catalog/standards/iso/34de480e-231f-4d03-9293-c5b79fa05d67/iso-22286-2018>

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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

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

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

<https://standards.iteh.ai/catalog/standards/iso/34de480e-231f-4d03-9293-c5b79fa05d67/iso-22286-2018>

Introduction

The dropping point of lubricating grease is the temperature at which grease passes from a semi-solid state to a liquid state under test conditions.

This change of state is typical of greases that contain organic thickeners (soaps mainly) exhibiting phase changes and softening when the temperature is increased. Non-soap greases (like bentonite or silica greases) are described as “not fusible”, i.e. have no dropping point. Upon heating, they can separate oil.

Results of the dropping point test are indicative of the maximum temperature at which grease can be heated without complete liquefaction or oil separation. The dropping point is a useful indication of the grease type. For soap-based greases, it is related to the nature of the cation. At equivalent cation, complex soap-based greases have dropping points higher than that of simple soap-based greases. This characteristic can be used for manufacturing quality controls and for establishing product specifications.

The dropping point is not considered as having a direct relation with the service performance; dropping point is in no case the maximum temperature for use of grease.

Some cooperative testing has indicated that concordance exists between the results obtained using this document and the results obtained using ISO 2176[4] and ISO 6299[3].

This document is based on References [4] and [5].

iTeh Standards
(<https://standards.itih.ai>)
Document Preview

[ISO 22286:2018](#)

<https://standards.itih.ai/catalog/standards/iso/34de480e-231f-4d03-9293-c5b79fa05d67/iso-22286-2018>

