



SLOVENSKI STANDARD

oSIST prEN ISO 3219-3:2025

01-november-2025

[Not translated]

Rheology - Part 3: Test procedure and examples for the evaluation of results when using rotational and oscillatory rheometry (ISO/DIS 3219-3:2025)

Rheologie - Teil 3: Versuchsdurchführung und beispielhafte Auswertungen der Rotations- und Oszillationsrheometrie (ISO/DIS 3219-3:2025)

Rhéologie - Partie 3: Mode opératoire d'essai et exemples d'évaluation des résultats en cas d'utilisation de la rhéométrie rotative et oscillatoire (ISO/DIS 3219-3:2025)

Ta slovenski standard je istoveten z: prEN ISO 3219-3

[oSIST prEN ISO 3219-3:2025](https://standards.iteh.ai/catalog/standards/sist/fabb5f51-e000-4f49-aac7-f3e3aa6ffae2/osist-pren-iso-3219-3-2025)

<https://standards.iteh.ai/catalog/standards/sist/fabb5f51-e000-4f49-aac7-f3e3aa6ffae2/osist-pren-iso-3219-3-2025>

ICS:

83.080.01	Polimerni materiali na splošno	Plastics in general
-----------	--------------------------------	---------------------

oSIST prEN ISO 3219-3:2025

en,fr,de



DRAFT International Standard

ISO/DIS 3219-3

Rheology —

Part 3:

Test procedure and examples for the evaluation of results when using rotational and oscillatory rheometry

Rhéologie —

Partie 3: Mode opératoire d'essai et exemples d'évaluation des résultats en cas d'utilisation de la rhéométrie rotative et oscillatoire

ICS: 83.080.01

ISO/TC 35/SC 9

Secretariat: **BSI**

Voting begins on:
2025-09-24

Voting terminates on:
2025-12-17

This document has not been edited by the ISO Central Secretariat.

ISO/CEN PARALLEL PROCESSING

THIS DOCUMENT IS A DRAFT CIRCULATED FOR COMMENTS AND APPROVAL. IT IS THEREFORE SUBJECT TO CHANGE AND MAY NOT BE REFERRED TO AS AN INTERNATIONAL STANDARD UNTIL PUBLISHED AS SUCH.

IN ADDITION TO THEIR EVALUATION AS BEING ACCEPTABLE FOR INDUSTRIAL, TECHNOLOGICAL, COMMERCIAL AND USER PURPOSES, DRAFT INTERNATIONAL STANDARDS MAY ON OCCASION HAVE TO BE CONSIDERED IN THE LIGHT OF THEIR POTENTIAL TO BECOME STANDARDS TO WHICH REFERENCE MAY BE MADE IN NATIONAL REGULATIONS.

RECIPIENTS OF THIS DRAFT ARE INVITED TO SUBMIT, WITH THEIR COMMENTS, NOTIFICATION OF ANY RELEVANT PATENT RIGHTS OF WHICH THEY ARE AWARE AND TO PROVIDE SUPPORTING DOCUMENTATION.

ISO/DIS 3219-3:2025(en)

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

oSIST prEN ISO 3219-3:2025

<https://standards.iteh.ai/catalog/standards/sist/fabb5f51-e000-4f49-aac7-f3e3aa6ffae2/osist-pren-iso-3219-3-2025>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2025

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
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

ISO/DIS 3219-3:2025(en)

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Guidelines for selection	2
4.1 General	2
4.2 Selection of the measuring device	2
4.3 Selection of the measuring geometry	3
4.4 Selection of the temperature control system	3
4.5 Selection of the measuring method	4
5 Preconditions for a measurement	6
5.1 Ambient conditions	6
5.2 Sample preparation, filling and cleaning	7
6 Performance of the measurement	8
6.1 General	8
6.2 Measuring profile	8
7 Basic tests and example evaluations	9
7.1 General	9
7.2 Rotational tests	9
7.2.1 Time-dependent tests in rotation	9
7.2.2 Temperature-dependent tests in rotation	13
7.2.3 Flow curves and viscosity curves	14
7.3 Oscillatory tests	19
7.3.1 Time-dependent tests in oscillation	19
7.3.2 Temperature-dependent tests in oscillation	20
7.3.3 Amplitude sweeps	23
7.3.4 Frequency sweeps	24
8 Combined basic tests	27
8.1 General	27
8.2 Flow curves and hysteresis area	27
8.3 Temperature tests as cycle tests	29
8.4 Master curve by means of time/temperature shift of frequency sweeps	29
8.5 Step tests for determination of the time-dependent structural change	31
8.6 Creep and recovery tests	32
9 Test report	34
Annex A (informative) Calculation examples	36
Bibliography	38

ISO/DIS 3219-3:2025(en)

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 35, *Paints and varnishes*, Subcommittee SC 9, *General test methods for paints and varnishes*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 139, *Paints and varnishes*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement), and in cooperation with ISO/TC 61, *Plastics*, SC 5, *Physical-chemical properties*.

A list of all parts in the ISO 3219 series can be found on the ISO website.

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.