



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN ISO 23168:2020

Paints and varnishes - Determination of water content - Gas- chromatographic method (ISO 23168:2019)

Peintures et vernis - Détermination de la
teneur en eau - Méthode par
chromatographie en phase gazeuse (ISO
23168:2019)

Beschichtungsstoffe - Bestimmung des
Wassergehaltes -
Gaschromatographisches Verfahren (ISO
23168:2019)

12/2020

National Foreword

This European Standard EN ISO 23168:2020 was adopted as Luxembourgish Standard ILNAS-EN ISO 23168:2020.

Every interested party, which is member of an organization based in Luxembourg, can participate for FREE in the development of Luxembourgish (ILNAS), European (CEN, CENELEC) and International (ISO, IEC) standards:

- Participate in the design of standards
- Foresee future developments
- Participate in technical committee meetings

<https://portail-qualite.public.lu/fr/normes-normalisation/participer-normalisation.html>

THIS PUBLICATION IS COPYRIGHT PROTECTED

Nothing from this publication may be reproduced or utilized in any form or by any mean - electronic, mechanical, photocopying or any other data carries without prior permission!

ILNAS-EN ISO 23168:2020

EUROPEAN STANDARD **EN ISO 23168**

NORME EUROPÉENNE

EUROPÄISCHE NORM

December 2020

ICS 87.040

English Version

**Paints and varnishes - Determination of water content -
Gas-chromatographic method (ISO 23168:2019)**

Peintures et vernis - Détermination de la teneur en eau
- Méthode par chromatographie en phase gazeuse (ISO
23168:2019)

Beschichtungsstoffe - Bestimmung des Wassergehaltes
- Gaschromatographisches Verfahren (ISO
23168:2019)

This European Standard was approved by CEN on 30 November 2020.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, 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: Rue de la Science 23, B-1040 Brussels

Contents	Page
European foreword.....	3

ILNAS-EN ISO 23168:2020 - Preview only Copy via ILNAS e-Shop

European foreword

The text of ISO 23168:2019 has been prepared by Technical Committee ISO/TC 35 "Paints and varnishes" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 23168:2020 by Technical Committee CEN/TC 139 "Paints and varnishes" the secretariat of which is held by DIN.

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 2021, and conflicting national standards shall be withdrawn at the latest by June 2021.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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

Endorsement notice

The text of ISO 23168:2019 has been approved by CEN as EN ISO 23168:2020 without any modification.

Paints and varnishes — Determination of water content — Gas- chromatographic method

*Peintures et vernis — Détermination de la teneur en eau — Méthode
par chromatographie en phase gazeuse*

**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2019

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
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Principle	1
5 Apparatus	2
5.1 Gas chromatograph.....	2
5.2 Sample injection system.....	2
5.3 Oven.....	2
5.4 Detector.....	2
5.5 Capillary column.....	2
5.6 Injection syringe.....	2
5.7 Data processing.....	2
5.8 Sample vials.....	2
5.9 Gas filter.....	2
5.10 Carrier gas.....	3
5.11 Analytical balance.....	3
5.12 Bottle-top dispenser.....	3
6 Reagents and materials	3
6.1 Internal standard (anhydrous).....	3
6.2 Dilution solvent.....	3
6.3 Water.....	3
6.4 Molecular sieve.....	3
7 Sampling	3
8 Procedure	4
8.1 Gas-chromatographic conditions.....	4
8.2 Water content of the dilution solvent.....	4
8.3 Calibration.....	4
8.4 Sample preparation.....	4
8.5 Quantitative determination of water content.....	5
9 Expression of results	6
10 Precision	6
10.1 General.....	6
10.2 Repeatability limit, r	6
10.3 Reproducibility limit, R	6
11 Test report	7
Annex A (informative) Example of gas-chromatographic conditions	8
Annex B (informative) Information about precision	9
Bibliography	11