

**Water quality - Gas chromatographic
determination of some selected
chlorophenols in water**

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 12673:2001 sisaldab Euroopa standardi EN 12673:1998 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 12673:2001 consists of the English text of the European standard EN 12673:1998.</p> <p>This document is endorsed on 18.06.2001 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This standard describes the gas chromatographic determination of 19 chlorophenols in drinking water, groundwater, rainwater, waste water, sea water and surface water. This standard describes an acetylation followed by liquid/liquid extraction and determination by gas chromatography and electron capture detection or mass selective detection. The method is validated for drinking water, surface water and waste water, but may be used for all above mentioned types of water. With this method chlorphenols can be determined over a range of concentrations from 0,1 my g/l to 1 mg/l, depending on the quantity of sample used and the component sensivity (level of chlorination) (See Annex A). In some cases complete seperation of isomers cannot be achieved. Then the sum is reported. This method may be applicable to other halogenated phenolic compounds, provided the method is validated for each case</p>	<p>Scope: This standard describes the gas chromatographic determination of 19 chlorophenols in drinking water, groundwater, rainwater, waste water, sea water and surface water. This standard describes an acetylation followed by liquid/liquid extraction and determination by gas chromatography and electron capture detection or mass selective detection. The method is validated for drinking water, surface water and waste water, but may be used for all above mentioned types of water. With this method chlorphenols can be determined over a range of concentrations from 0,1 my g/l to 1 mg/l, depending on the quantity of sample used and the component sensivity (level of chlorination) (See Annex A). In some cases complete seperation of isomers cannot be achieved. Then the sum is reported. This method may be applicable to other halogenated phenolic compounds, provided the method is validated for each case</p>
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ICS 13.060.01

Võtmesõnad: chemical analysis, chromatographic analysis, determination of content, extraction, gas chromatography, phenols, quality, water, water pollution, water tests

ICS 13.060.50

English version

Water quality

Gas chromatographic determination of some
selected chlorophenols in water

Qualité de l'eau – Dosage par chromatographie en phase gazeuse de certains chlorophénols dans les eaux

Wasserbeschaffenheit – Gaschromatographische Bestimmung einiger ausgewählter Chlorphenole in Wasser

This European Standard was approved by CEN on 1998-11-26.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 230 "Water analysis", 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 1999, and conflicting national standards shall be withdrawn at the latest by June 1999.

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

Annexes designated "informative" are only given for information. In this Standard Annexes A to G are informative. It is absolutely essential that tests conducted according to this standard are carried out by suitably qualified staff.

1 Scope

This European standard describes the gas chromatographic determination of 19 chlorophenols (2-, 3-, and 4-chlorophenol, 2,3-, 2,4-, 2,5-, 2,6-, 3,4- and 3,5-dichlorophenol, 2,3,4-, 2,3,5-, 2,3,6-, 2,4,5-, 2,4,6 and 3,4,5-trichlorophenol, 2,3,4,5-, 2,3,4,6-, and 2,3,5,6-tetrachlorophenol and pentachlorophenol) in drinking water, groundwater, rainwater, waste water, sea water and surface water.

This standard describes an acetylation followed by a liquid/liquid extraction and determination by gas chromatography and electron capture detection or mass selective detection. The method is validated for drinking water, surface water and waste water, but may be used for all above mentioned types of water.

With this method chlorophenols can be determined over a range of concentrations from 0,1 µg/l to 1 mg/l, depending on the quantity of sample used and the component sensitivity (level of chlorination) (see Annex A). In some cases complete separation of isomers cannot be achieved. Then the sum is reported. This method may be applicable to other halogenated phenolic compounds, provided the method is validated for each case.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references subsequent amendments to or revisions of any of these publications apply to this European standard only when incorporated in it by amendment or revision. For undated reference the latest edition of the publication referred to applies.

ISO 5667-5 : 1991

Water quality – Sampling – Part 5: Guidance on sampling of drinking water and water used for food and beverage processing

ISO 5667-6 : 1990

Water quality – Sampling – Part 6: Guidance on sampling of rivers and streams

ISO 5667-8 : 1993

Water quality – Sampling – Part 8: Guidance on sampling of wet deposition

ISO 5667-9 : 1992

Water quality – Sampling – Part 9: Guidance on sampling from marine waters

ISO 5667-10 : 1992

Water quality – Sampling – Part 10: Guidance on sampling from waste waters

ISO 5667-11 : 1993

Water quality – Sampling – Part 11: Guidance on sampling from ground waters