

TAHKEKÜTUSED

Kloori määramine Eschka segu abil

Solid mineral fuels

**Determination of chlorine using Eschka mixture
(ISO 587:1997, modified)**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-ISO 587:2018 „Tahkekütused. Kloori määramine Eschka segu abil“ sisaldab rahvusvahelise standardi ISO 587:1997 „Solid mineral fuels. Determination of chlorine using Eschka mixture“ modifitseeritud ingliskeelset teksti.	This Estonian Standard EVS-ISO 587:2018 consists of the modified English text of the International Standard ISO 587:1997 „Solid mineral fuels. Determination of chlorine using Eschka mixture“.
Ettepaneku rahvusvahelise standardi ümbertrüki meetodil ülevõtuks on esitanud EVS/TK 57, standardi avaldamist on korraldanud Eesti Standardikeskus.	Proposal to adopt the International Standard by reprint method has been presented by EVS/TK 57, the Estonian Standard has been published by the Estonian Centre for Standardisation.
Standard EVS-ISO 587:2018 on jõustunud sellekohase teate avaldamisega EVS Teataja 2018. aasta aprillikuu numbris.	Standard EVS-ISO 587:2018 has been endorsed with a notification published in the April 2018 issue of the official bulletin of the Estonian Centre for Standardisation.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

Käsitlusala

See rahvusvaheline standard käsitleb kloori sisalduse määramist kivisöes, pruunsöes, ligniidis, **[MOD]** põlevkivis, **[MOD]** kooksis **[MOD]** ja poolkooksis **[MOD]**, kasutades Eschka segu.

Selles standardis on tehtud järgmised muudatused:

Sellesse standardisse on sisse viidud täiendused, mis võimaldavad standardi alusel määrata kloori sisaldust põlevkivis ja poolkooksis, kasutades Eschka segu. Täiendused, mille algus ja lõpp on tähistatud märgisega **[MOD]**, on sisse viidud järgmistesse jaotistesse:

- peatükk 1;
- peatükk 2;
- peatükk 6;
- jaotis 7.1;
- jaotis 7.2.

This document is a preview generated by EVS

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile standardiosakond@evs.ee.

ICS 75.160.10

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:

Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

Contents

Foreword	V
1 Scope	1
2 Normative references	1
3 Principle	1
4 Reagents	1
5 Apparatus	2
6 Preparation of the test sample	3
7 Procedure	3
8 Expression of results	4
9 Precision	6
10 Test report	6
Annex A (informative) Derivation of factors used in calculations in this International Standard	8

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 nongovernmental, 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 587 was prepared by Technical Committee ISO/TC 27, *Solid mineral fuels*, Subcommittee SC 5, *Methods of analysis*.

This third edition cancels and replaces the second edition (ISO 587:1981), which has been technically revised.

Annex A of this International Standard is for information only.

This document is a preview generated by EVS

Taotluslikult tühjaks jäetud

1 Scope

This International Standard specifies a method of determining the chlorine content of hard coal, brown coals, lignite, [MOD] oil shale, [MOD] coke [MOD] and semi-coke [MOD] using Eschka mixture.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

[MOD] ISO 11722, *Solid mineral fuels — Hard coal — Determination of moisture in the general analysis test sample by drying in nitrogen*.

ISO 687, *Coke — Determination of moisture in the analysis sample*.

ISO 1170, *Coal and coke — Calculation of analyses to different bases*.

ISO 18283, *Hard coal and coke — Manual sampling*.

ISO 5068-2, *Brown coals and lignites — Determination of moisture content — Part 2: Indirect gravimetric method for moisture in the analysis sample*.

ISO 5069-2, *Brown coals and lignites — Principles of sampling — Part 2: Sample preparation for determination of moisture content and for general analysis*.

ISO 13909 (all parts), *Hard coal and coke — Mechanical sampling*.

EVS 668, *Oil shale — Determination of moisture*. [MOD]

3 Principle

A known mass of sample is ignited in intimate contact with Eschka mixture in an oxidizing atmosphere to remove combustible matter and to convert the chlorine to alkaline chlorides. These are extracted with nitric acid or water and determined by either the Volhard or the Mohr method, or by potentiometric titration using an Ion Selective Electrode (ISE).

4 Reagents

WARNING — Care should be exercised when handling reagents, many of which are toxic and corrosive.

During analysis, unless otherwise stated, use only reagents of recognized analytical grade and only distilled water, or water of equivalent purity.

4.1 For all methods

4.1.1 Eschka mixture

Mix two parts by mass of light, calcined magnesium oxide with one part of anhydrous sodium or potassium carbonate. The mixture shall entirely pass a test sieve of 0,212 mm nominal aperture.