

Riasy a produkty z rias Odber vzoriek Návod na definíciu odberových programov a odberových protokolov

STN EN 17980

56 6710

Algae and algae products - Sampling - Guidelines for the definition of sampling programs and sampling protocols

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 06/24

Obsahuje: EN 17980:2024

138666

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM EN 17980

March 2024

ICS 13.020.55

English Version

Algae and algae products - Sampling - Guidelines for the definition of sampling programs and sampling protocols

Algues et produits d'algues - Échantillonnage - Lignes directrices pour la définition des programmes et des protocoles d'échantillonnage Algen und Algenprodukte - Probenahme - Leitlinien für die Festlegung von Probenahmeprogrammen und Probenahmeprotokollen

This European Standard was approved by CEN on 19 February 2024.

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, Türkiye 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

Cont	Contents Page		
Europ	ean foreword	4	
Introd	luction	5	
1	Scope	6	
2	Normative references	6	
3	Terms and definitions	6	
4	Principles of sampling		
4.1	General		
4.2	Basic rules to obtain a representative sample		
4.3	Good practices of sampling		
5	Development of a sampling program	9	
5.1	General	9	
5.2	Identification of a lot	10	
5.3	How to define a sample: where and when to collect, dimension and increments	10	
5.3.1	General	10	
5.3.2	For macroalgae harvested from the natural environments	10	
5.3.3	For macroalgae produced on open ponds		
5.3.4	For microalgae produced in open ponds or raceways	11	
5.3.5	For microalgae produced in closed systems	11	
5.4	Number and dimension of samples if bulk material		
5.5	Number and dimension of samples if packaged material	12	
6	Development of a sampling protocol	12	
6.1	General		
6.2	Equipment	13	
6.2.1	General	13	
6.2.2	Equipment to collect and store increments or samples	13	
6.2.3	Protective equipment for the personnel collecting the sample	13	
6.2.4	Equipment to identify the sample container	13	
6.2.5	Equipment to store, preserve and transport the sample container	13	
6.3	Personnel	14	
6.3.1	General	14	
6.3.2	Required knowledge	14	
6.3.3	Training	14	
6.4	Collection of increments	14	
6.4.1	General	14	
6.4.2	What to do before sampling	14	
6.4.3	What to do during sampling	15	
6.4.4	What to do after sampling	15	
Annex	A (informative) Microalgae produced with controlled environment	17	
A.1	General information to be supplied	17	
A.2	Example of a sampling program	17	
A.3	Example of a sampling protocol	18	

Annex	B (informative) Macroalgae produced/collected from the wild	. 19
B.1	General information to be supplied	. 19
B.2	Example of a sampling program	. 19
B.3	Example of a sampling protocol	. 20
Annex	C (informative) Macroalgae produced in ponds/tanks with controlled environment	t21
C.1	General information to be supplied	. 21
C.2	Example of a sampling program	. 21
C.3	Example of a sampling protocol	. 22
Biblio	eraphy	. 2 3

European foreword

This document (EN 17980:2024) has been prepared by Technical Committee CEN/TC 454 "Algae and algae products", the secretariat of which is held by NEN.

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 September 2024, and conflicting national standards shall be withdrawn at the latest by September 2024.

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.

This document has been prepared under a standardization request addressed to CEN by the European Commission. The Standing Committee of the EFTA States subsequently approves these requests for its Member States.

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Türkiye and the United Kingdom.

Introduction

This document has been prepared by the experts of CEN/TC 454 "Algae and algae products".

The European Committee for Standardization (CEN) was requested by the European Commission (EC) to draft European standards or European standardization deliverables to support the implementation of Article 3 of Directive 2009/28/EC for algae and algae products.

This request, presented as Mandate M/547, also contributes to the Communication on "Innovating for Sustainable Growth: A Bio economy for Europe".

The former working group CEN Technical Board Working Group 218 "Algae", was created in 2016 to develop a work programme as part of this Mandate. The technical committee CEN/TC 454 'Algae and algae products' was established to carry out the work programme that will prepare a series of standards.

The interest in algae and algae products has increased significantly in Europe as a valuable source including but not limited to carbohydrates, proteins, lipids, and several pigments. These materials are suitable for use in a wide range of applications from food and feed purposes to other sectors, such as textile, cosmetics, biopolymers, biofuel and fertilizer/biostimulants. Standardization was identified as having an important role in order to promote the use of algae and algae products.

The work of CEN/TC 454 should improve the reliability of the supply chain, thereby improving the confidence of industry and consumers in algae and algae products and will promote and support commercialisation of the European algae industry.

This document has been developed with the aim to help algae producers and algae products industries to establish a sound sampling program and a correct sampling protocol. The sampling program will define the strategy for sampling, when, where and how much, and the sampling protocol will define how the samples will be collected, packaged, labelled, preserved and transported until the final destination: laboratory, long term storage, customer, health safety authority, etc.

1 Scope

This document specifies a set of principles and rules that algae producers, algae products industries, laboratories or other entities that collect algae and algae products samples can follow for the definition of their own sampling programs and sampling protocols.

In the context of this document, algae are a functional group that include microalgae, macroalgae, cyanobacteria and *Labyrinthulomycetes*.

As algae and their production processes are so diverse, this document does not define a specific sampling program and/or a specific sampling protocol. Instead, this document specifies the aspects that can be considered when defining its own sampling program and protocol.

This document describes when, where and how to draw a representative sample. For guidance on sample preparation of dry and wet samples of micro- and macroalgae, and algae products, please refer to EN 17605.

This document is to be used for the collection of samples for lot characterization for commercial or legal/regulatory purposes. However, this document can also be used for any type of sampling of algae, including samples for quality control during production.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 17399:2020, Algae and algae products — Terms and definitions

koniec náhľadu – text ďalej pokračuje v platenej verzii STN