

<b>STN</b>	<p style="text-align: center;"><b>Kvalita vody</b> <b>Pokyny na terénné a laboratórne postupy</b> <b>kvantitatívnej analýzy a identifikácie</b> <b>makroinvertebrát z vnútrozemských povrchových</b> <b>vôd</b></p>	<p style="text-align: center;"><b>STN</b> <b>EN 17136</b></p>
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Water quality - Guidance on field and laboratory procedures for quantitative analysis and identification of macroinvertebrates from inland surface waters

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

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English Version

**Water quality - Guidance on field and laboratory  
procedures for quantitative analysis and identification of  
macroinvertebrates from inland surface waters**

Qualité de l'eau - Guide sur les procédures de terrain et  
de laboratoire pour l'analyse quantitative et  
l'identification des macro-invertébrés des eaux de  
surface continentales

Wasserbeschaffenheit - Anleitung zu Feld- und  
Laborverfahren zur quantitativen Analyse und  
Bestimmung von Makroinvertebraten aus  
Binnenoberflächengewässern

This European Standard was approved by CEN on 14 December 2018.

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## **European foreword**

This document (EN 17136:2019) 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of an identical text or by endorsement, at the latest by August 2019, and conflicting national standards shall be withdrawn at the latest by August 2019.

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.

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## Introduction

**WARNING** — Working in or around water is inherently dangerous. Care should be taken when working with different and generally toxic preservatives. This standard does not purport to address the safety problems associated with its use. It is the responsibility of the user to adopt appropriate health and safety practices in compliance with national regulatory conditions.

Macroinvertebrates are important in water quality assessment and form one of the biological quality elements in the EC Water Framework Directive (WFD 2000/60/EC). Macroinvertebrates are a very diverse group of organisms for which an efficient and effective procedure for analysis is not always obvious. Their large size range, very different appearances and the diverse range of habitats they live in produce specific problems for collecting and analysis. This standard aims to provide a general procedure for the quantitative analysis of macroinvertebrate samples for the WFD in particular and scientific studies in general. It is not intended to give a full and exact overview of all possible methods. Although specific situations and investigation objectives may require adjustments to the outlined procedure the general principles given in this guideline should still be valid.

## **1 Scope**

This document gives guidance on the quantitative estimation of abundance and identification of macroinvertebrates in samples taken from inland waters. The procedure deals with pre-treatment (cleaning), sub-sampling, sorting, and final identification of organisms from preserved and unpreserved samples originating from natural habitats or artificial substrates and their transport to the laboratory. Specific guidance is given for preservation for DNA-analysis.

## **2 Normative references**

There are no normative references in this document.

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