Irish Standard
I.S. EN 16161:2012

Water quality - Guidance on the use of in vivo absorption techniques for the estimation of chlorophyll-a concentration in marine and fresh water samples

I.S. EN 16161:2012

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English Version

Water quality - Guidance on the use of in vivo absorption techniques for the estimation of chlorophyll-a concentration in marine and fresh water samples

Qualité de l'eau - Lignes directrices sur l'utilisation des techniques d'absorption in vivo pour l'estimation de la concentration de chlorophylle-a dans les eaux douces et eaux marines

Wasserbeschaffenheit - Anleitung für die Anwendung der in-vivo-Absorption zur Abschätzung der Chlorophyll a-Konzentration in Meer- und Süßwasser

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Foreword

This document (EN 16161:2012) 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of an identical text or by endorsement, at the latest by January 2013, and conflicting national standards shall be withdrawn at the latest by January 2013.

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Introduction

Surveys of chlorophyll and nutrient concentration are fundamental descriptors of primary productivity and eutrophic threat in coastal and inland waters.

Chlorophyll-a concentration can be determined by sampling and laboratory analysis using the techniques described in ISO 10260. Achieving consistent results with this technique requires careful attention during the various steps of the process commonly used, such as during sampling, transport, filtering, freezing, storage and extraction and subsequent pigment estimation.

The *in vivo* technique described here can be applied to surveys where a rapid non-destructive and repeatable measurement capability is required. It can be used either in the field or laboratory. No chemicals are required. Utilised in association with other methods of chlorophyll-a determination such as ISO 10260, HPLC pigment analysis and chlorophyll fluorescence measurements techniques, it can help identify sources of inconsistency or be used as an alternative technique in its own right. As chlorophyll-a estimates can be achieved in times as short as one minute, the technique can enhance surveying capability considerably.

This standard describes procedures to implement and verify performance.