
**Water quality — Determination of
the dissolved fraction of selected
active pharmaceutical ingredients,
transformation products and
other organic substances in
water and treated waste water —
Method using high performance
liquid chromatography and mass
spectrometric detection (HPLC-MS/MS
or -HRMS) after direct injection**

*Qualité de l'eau — Détermination de la fraction dissoute des
ingrédients pharmaceutiques actifs sélectionnés, des produits de la
transformation et d'autres substances organiques dans l'eau et dans
l'eau résiduaire — Méthode par chromatographie en phase liquide à
haute performance et détection par spectrométrie de masse (CLHP-
MS/MS ou -HRSM) après l'injection directe*



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Foreword

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Introduction

Pharmaceutical ingredients are essential for human and animal health. Through application or improper disposal, active pharmaceutical ingredients enter the water cycle unchanged or transformed. This can happen via municipal waste water, treated at treatment plants. There, some active pharmaceutical ingredients and transformation products cannot be removed completely from the waste water by conventional treatment techniques. Active pharmaceutical ingredients and their transformation products also travel through sludge to the soil and subsequently enter water bodies via leachate, depending on the nature of the ground and the active ingredients. Active pharmaceutical ingredients and their transformation products are therefore found in treated waste water, as well as in surface and ground water. This document specifies a liquid chromatography method with mass spectrometric detection for the determination of selected active pharmaceutical ingredients and their transformation products in the dissolved fraction.

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