CHIMIA **2004**, *58*, No. 7/8

FH – HES Fachhochschule – Hautes Ecoles Spécialisées

Chimia 58 (2004) 560–562

ISSN 0009–4293

Fast Determination of Chlorophenols at the ppt Level. A New Analytical Tool for Quality Control of Cork Stoppers?

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Abstract: Chlorophenols (CPs) are the precursors of the main source for the so-called musty taint, especially in wine. Currently, different fast methods for the determination of the chloroanisoles (CAs), mainly 2,4,6-trichloroanisole (TCA), the principal causative agent, are used for the quality control of cork stoppers. The methods available for CPs present either a long sample preparation step or are less representative for a batch, because of the very small sample size. We present a new fast method for the determination of chlorophenols and chloroanisoles at the ppt level by GC-MSMS using *in situ* derivatization and solid-phase microextraction (SPME) preconcentration. We present first results of the development of a new tool for efficient quality control in the cork stopper production.

Keywords: Chloroanisoles · Chlorophenols · Cork · Derivatization · GC-MSMS · Musty taint · Solid-phase microextraction · Wine