## FOOD ANALYSIS

A VALIDATED LC/MS/MS SOLUTION FOR THE ANALYSIS OF GROWTH REGULATORS IN CEREALS



Solutions for Your Analytical Business
Markets and Applications Programs



This Solution is dedicated to the analysis of Chlormequat and Mepiquat in different cereals.

## **Matrices**

- Soft Wheat
- · Hard Wheat

## Target Compounds

- Chlormequat
- Mepiquat

In agriculture, the quaternary ammonium herbicides Chlormequat and Mepiquat are used as plant growth regulators either individually, as mixtures or with other pesticides.

European Community regulations determine the maximum allowed amounts of those compounds in different matrices for its member states.

Agilent offers a turn-key Solution covering:

- Sample preparation
- · Sample analysis
- · Data analysis
- · Full Agilent support

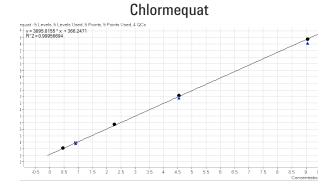


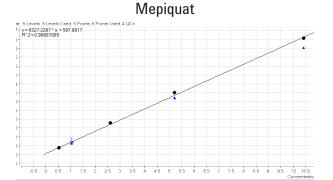


The working range goes from 0.01 mg/kg to 0.10 mg/kg for all analytes. LOQs, LODs, precision and recoveries are calculated in accordance to DG SANCO guidelines and used whenever possible the MRLs established in the Regulation (EC) No 396/2005 of the European Parliament and the Council on maximum residue levels (MRLs) in products of plant and animal origin.

Sample preparation is done with a single solvent extraction. Sample analysis is performed with an Agilent UHPLC 1260 and an Agilent 6460 triple quadrupole.



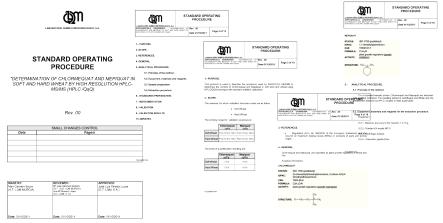




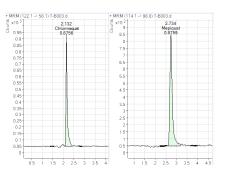
Straight calibration from 0,5 ppb to 10 ppb

The Agilent Pesticides Solution for cereals comprises the following:

- Complete hardware set-up (Agilent 1260 UHPLC and Agilent 6460 triple quadrupole) with dedicated analytical column;
- Standard operating procedure (SOP) with detailed descriptions of the analysis and validation procedures;
- Method of analysis (a DVD/CD containing sample preparation and sample analysis methods, recommended consumables and materials);
- One week training at Laboratorio Químico-Microbiológico (Murcia, Spain) on sample prep, validation procedures and analytical methods;
- On-site Training and Support (at customer site) covering Qualitative and Quantitative analysis;



## Chlormequat and Mepiquat at 1 ppb





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