

Application note:

Procedure for the Analysis of Rinse Waters using AgraQuant® Allergen Test Kits

AgraQuant® Almond (COKAL0748)

AgraQuant® Beta-Lactoglobulin (COKAL1048)

AgraQuant® Casein (COKAL1200)

AgraQuant® Cashew (COKAL3148)

AgraQuant® Crustacea (COKAL2248)

AgraQuant® Egg White (COKAL0848)

AgraQuant® Fish (COKAL2548)

AgraQuant® Gluten™ G12 (COKAL0200)*

AgraQuant® Gluten (COKAL0248)*

AgraQuant® Hazelnut (COKAL0348)

AgraQuant® Lupin (COKAL1548)

AgraQuant® Lysozyme (COKAL2848)

AgraQuant® Milk (COKAL2448)

AgraQuant® Mustard (COKAL2148)

AgraQuant® Ovalbumine (COKAL2948)

AgraQuant® Peanut (COKAL0148)

AgraQuant® Pistachio (COKAL2748)

AgraQuant® Sesame (COKAL1948)

AgraQuant® Soy (COKAL0448)

AgraQuant® Walnut (COKAL0948)

All the Romer Labs® ELISA test kits of the AgraQuant® Allergen line can not only be used for the analysis of finished food products, but also to detect allergens in rinse waters.

The analysis of the rinse water used for cleaning at a production site is a fast and simple way to proof the efficiency of the cleaning procedure and is an important tool in cleaning validations.

Modified instructions for the investigation of rinse waters:

- Bring the test kit to room temperature prior to performing any test.
- Handle the standards as described in the package insert.
- Take a representative sample of the water that was used for the final rinse after cleaning.
- For rinse waters, no further sample treatment is necessary. Pipette 100 µL of the rinse water directly into each well, just as if it was a sample extract.
- Perform the assay according to the instructions given in the package insert.
- After adding the Stop solution read the wells with an ELISA plate reader using a 450 nm filter.
- Interpret the results by using the Romer Labs® Spreadsheets or the plate reader software.
- In order to obtain the final result for the rinse water concentration, the calculated value needs to be divided by a factor of 20. This is necessary, because normally the samples are diluted during extraction, which needs to be considered.

$$\text{Allergen conc. in rinse water [ppm]} = \frac{\text{conc. calculated by Spreadsheet or Reader software}}{20}$$

* Due to different dilutions during the normal extraction procedure, the calculated value for AQ Gluten (COKAL0248) needs to be divided by 50 and for AQ Gluten G12 (COKAL0200) it needs to be divided by 400 (instead of 20).