

# Ring test

## Highly polar pesticides in grapes

### P1910-RT



# Summary

The entire report is made available to participants only.

Designed, realised and evaluated by

**PROOF-ACS GmbH**  
**Bremen, Germany**

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A handwritten signature in blue ink that reads "Schindler". The signature is written in a cursive, flowing style.

Dr. Birgit Schindler

The proficiency test evaluates the performances of laboratories with respect to their ability to quantify polar pesticides in grapes.

22 laboratories across five European countries (Austria, Greece, Germany, Italy and Spain) took part in the test.

Organic grapes are used as raw material. The grapes are homogenised and tested for incurred residues. The raw material was free from incurred residues of chlormequat (< 0.005 mg/kg), ethephon, glyphosate, and AMPA (< 0.01 mg/kg) and contains phosphonic acid at a level < 0.05 mg/kg.

In order to prepare the test material, the homogenate is spiked with

*chlormequat chloride, ethephon, glyphosate, AMPA, and phosphonic acid.*

The performance of laboratories in the test is evaluated according to

- the comparability of the results. The evaluation of the comparability is based on the z-score model. The z-score should be at least  $\leq |2|$ .
- the trueness of the results. The trueness is expressed as the coverage of the spiked level in %. The coverage should be at least between 70 and 120 % of the spiked level. The trueness criterion is not applicable to phosphonic acid due to the incurred residues in the blank material.

## Results

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results	Comparability criterion: no. of participants, with z-score $\leq  2 $	Trueness criterion: no. of participants with results within 70-120 % recovery of the spiked level
Chlormequat chloride	0.024	0.0217	20	20	19
Ethephon	0.11	0.0895	20	20	17
Glyphosate	0.082	0.0800	20	19	19
AMPA	0.055	0.0557	19	15	14
Phosphonic acid	0.057*	0.0717	20	16	Not evaluated

\* The spiked level of phosphonic acid is provided for information only due to incurred residues of phosphonic acid in the blank material.