Facing analytical quality.

Ring test
Dithiocarbamates and dithianon in pears
P2127-RT

Summary

The entire report is available to participants only.

Designed, realised and evaluated by

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The proficiency test evaluates the performances of laboratories with respect to their ability to quantify dithiocarbamates and dithianon in pears. 16 laboratories across six countries (Austria, Germany, Italy, South Africa, Spain, and Switzerland) took part. All laboratories kept the term of submission of results and are considered for evaluation.

The test material is spike with:

- 0.098 mg/kg thiram, expressed as CS_2, and
- 0.064 mg/kg dithianon.

The test material is prepared of organic pears, free from incurred residues of dithiocarbamates and dithianon at a level of 0.010 mg/kg. The pears are homogenised and spiked with thiram and dithianon thereafter. Liquid nitrogen is used throughout the whole process of preparation, spiking and bottling of the test material to keep the material in deep-frozen condition. The test material consists of a powdery ice. Therefore, sub-samples can be taken without thawing the test samples.

The sophisticated process of test material preparation at very low temperatures was applied in order to avoid degradation of thiram and dithianon. However, degradation of both parameters was observed. As a consequence, the trueness criterion is not applicable for evaluation.

The performance of the 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 ≤ |2|.

Summary of results:

Parameter	Spiked level [mg/kg]*	Assigned value [mg/kg]	Total number of results	No. of participants, which pass the **comparability criterion**
Thiram, expressed as CS_2	0.098	0.0518	12	8
Dithianon	0.064	0.0179	15	12

* Spiked levels are provided for information purposes only.