

Reference Material

Polar pesticides, aminoalcohols and quaternary ammonium compounds in avocado

P2412-RMAv



Summary

Reference material P2412-RMAv is validated in the ring test P2412-RT, which is organised, performed, and evaluated according to the requirements of DIN EN ISO/IEC 17043 and the “International Harmonized Protocol”. DIN ISO 13528 is considered during the evaluation of the submitted results and during homogeneity testing. Details related to the applied statistics are summarised in the full specification, which is provided after purchase of the reference material.

Reference material P2412-RMAv consists of 100 g of an avocado homogenate, which is stabilised with ascorbic acid and spiked with polar pesticides, aminoalcohols, and quaternary ammonium compounds (see table 1).

The reference material is validated in ring test P2412-RT with 8 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the ring test P2412-RT, are summarised in table 1.

Table 1. Spiked levels and assigned values

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	No. of results
Ethephon	0.14	0.136	8
Chlorate	0.078	0.0749	8
Perchlorate	0.045	0.0446	8
Glyphosate	0.039	0.0381	8
Phosphonic acid	1.1*	1.52	7
Morpholine	0.72	-	5
Diethanolamine	0.060	-	5
Triethanolamine	0.25	-	5
BAC C-8	0.045	-	5
BAC C-10	0.023	-	5
BAC C-12	0.033	-	5
BAC C-14	0.041	-	5
DDAC C-8	0.056	-	5
DDAC C-10	0.038	-	5

* The spiked level is provided for information only. The raw material contains incurred residues of phosphonic acid.

The results related to the aminoalcohols and the quaternary ammonium compounds are evaluated with respect to the trueness criterion (70 to 120 % of the spiked level). The comparability criterion (z-score, assigned value) is not applicable due to the limited number of reported results.