

Reference Material Polar pesticides in papaya

P2616-RMPa



Summary

Reference material P2616-RMPa is validated in ring test P2616-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 P2616-RMPa consists of a homogenate of papaya (150 g), which is spiked with 18 polar pesticides (see table 1).

The corresponding unspiked homogenate of papaya (150 g) is available as blank material P2616-BLPa. The blank material is free from incurred residues of all spiked parameters.

The reference material is validated in ring test P2616-RT with 20 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the ring test P2616-RT, are summarised in table 1. Assigned values are available of chlorate, perchlorate, ethephon, phosphonic acid, morpholine, diethanolamine, triethanolamine, diquat, paraquat, DDAC C-10, difluoroacetic acid, and trifluoroacetic acid. The accepted ranges with respect to the comparability ($|z\text{-score}| \leq 2$) are available for the parameters mentioned before. The accepted ranges with respect to the trueness criterion (70 to 120 % of the spiked level) are available for all parameters in table 1.

Table 1. Spiked levels and assigned values

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results
Chlorate	0.055	0.0550	18
Perchlorate	0.036	0.0418	19
Ethephon	0.16	0.151	18
Phosphonic acid	0.075	0.0743	18
Morpholine	0.050	0.0520	9
Diethanolamine	0.073	0.0821	9
Triethanolamine	0.084	0.0782	8
Diquat	0.035	0.0331	8
Paraquat	0.042	0.0418	8
BAC C-8	0.023	-	6
BAC C-10	0.028	-	6
BAC C-14	0.021	-	6
BAC C-18	0.017	-	6
DDAC C-8	0.018	-	6
DDAC C-10	0.022	0.0204	7
DDAC C-12	0.024	-	6
Difluoroacetic acid	0.036	0.0359	12
Trifluoroacetic acid	0.24	0.267	10