

Reference Material
Polar pesticides, amino alcohols,
QACs, and bromide in rice
P2415-RMRi



Summary

Reference material P2415-RMRi is validated in the ring test P2415-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 P2415-RMRi consists of 120 g of rice flour, which is spiked with polar pesticides, amino alcohols, and quaternary ammonium compounds (QACs), and bromide (see table 1).

The reference material is validated in ring test P2415-RT with 14 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the ring test P2415-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
Chlorate	0.039	0.0397	12
Perchlorate	0.024	0.0244	11
Glyphosate	0.068	0.0670	12
AMPA	0.032	0.0344	12
Phosphonic acid	0.45	0.520	11
Morpholine	0.095	0.0807	7
Diethanolamine	0.051	0.0647	7
Triethanolamine	0.079	0.0771	7
BAC C-8	0.018	-	5
BAC C-12	0.022	-	5
BAC C-16	0.019	-	5
DDAC C-8	0.018	-	5
DDAC C-10	0.026	-	5
Bromide	12	-	6

The results related to QACs and bromide 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.