

# Reference Material

## Polar pesticides and contaminants in black tea

### P2217-RMBt



- Summary -

Please note:

Reference material P2217-RMBt is a validated control material and not a certified reference material. The reference material is validated in the ring test P2217-RT, which is organised, performed, and evaluated according to the requirements of DIN EN ISO/IEC17043 and the “International Harmonized Protocol”. DIN ISO13528 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 P2217-RMBt consists of 120 g of milled black tea, which is spiked with eleven polar pesticides and contaminants (see table 1). The corresponding unspiked milled black tea (100 g) is available as blank material P2217-BLBt. The blank material is free from anthraquinone, biphenyl, chlorate, perchlorate, glyphosate, AMPA, diquat, paraquat, matrine and oxymatrine (all < 0.01 mg/kg). The blank material contains incurred levels of nicotine and trimesium. Trimesium is not part of the specification.

The reference material is validated in ring test P2217-RT with 9 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the ring test P2217-RT, are summarised in table 1.

*Table 1. Spiked levels and assigned values*

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results
Anthraquinone	0.055	0.0504	7
Biphenyl	0.045	0.0446	7
Chlorate	0.028	0.0286	7
Perchlorate	0.12	0.119	7
Nicotine	0.062*	0.0797	7
Glyphosate	0.12	-	6
AMPA	0.080	-	5
Diquat	0.078	-	3
Paraquat	0.065	-	3
Matrine	0.089	-	4
Oxymatrine	0.069	-	4

\* The spiked level related to nicotine is provided for information only. The raw material contains incurred residues of nicotine.