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Reference Material
Multi-method pesticides, glyphosate, and antibiotics in honey

P2527-RMHo

Summary

Reference material P2527-RMHo is validated in the ring test P2527-RT, which is organised, performed, and evaluated according to the requirements of DIN EN ISO/IEC 17043 and the “International Harmonized Protocol”. 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 P2527-RMHo consists of 60 g of a rapeseed honey, which is spiked with 8 pesticides, covered by common pesticides multi-residue methods, glyphosate, and 9 antibiotics of different sub-groups (see table 1).

The reference material is validated in ring test P2527-RT with 10 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the ring test P2527-RT, are summarised in table 1. Besides the pesticides mentioned below, the material also contains clopyralid, which is not included in the specification, as the blank material contains incurred levels of clopyralid as well. The accepted ranges with respect to the comparability and the trueness are specified for all pesticides. The accepted ranges with respect to the antibiotics are specified with respect to the trueness only due to the limited number of results, which were reported in P2527-RT.

Table 1. Spiked levels and assigned values

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results
Amitraz (sum)	0.21	0.198	8
Boscalid	0.089	0.0925	8
Chlorpyrifos	0.017	0.0155	8
Clothianidin	0.018	0.0172	9
Coumaphos	0.047	0.0438	9
Fenvalerate	0.088	0.0886	8
Thiacloprid	0.067	0.0673	9
Thiametoxam	0.029	0.0281	9
Glyphosate	0.022	0.0213	8
AMOZ	0.0030	-	2
Chloramphenicol	0.0060	-	2
Ciprofloxacin	0.018	-	3
Dapson	0.0035	-	2
Metronidazole	0.0050	-	3
Oxytetracycline	0.014	-	3
Streptomycin	0.065	-	3
Sulfamethazine	0.013	-	3
Tylosin B	0.037	-	2