

Reference Material of
rolling proof 2023
Multi-method pesticides in
grapefruits
P2322-RMGf



- Summary -

Please note:

Reference material P2322-RMGf is a validated control material and not a certified reference material. The reference material is validated in ring test P2322-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 P2322-RMGf consists of 120 g of a grapefruit homogenate, which is spiked with 34 multi-method pesticides (see table 1). The corresponding unspiked grapefruit homogenate (120 g) is available as blank material P2322-BLGf. The blank material is free from all spiked parameters at a level of 0.01 mg/kg (not detected).

The reference material is validated in ring test P2322-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 P2322-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
2,4-DB	0.042	-	5
Acrinathrin	0.018	0.0182	8
Ametryn	0.030	0.0282	8
Azinphos-ethyl	0.051	0.0490	8
Biphenyl	0.020	0.0198	7
Bromacil	0.026	0.0254	7
Bromopropylate	0.041	0.0410	8
Buprofezin	0.061	0.0622	7
Cadusafos	0.023	0.0229	8
Carbaryl	0.057	0.0457	8
Carbofuran	0.034	0.0338	7
Chlordane cis	0.062	0.0606	8
Chlorfenson	0.046	0.0413	8
Chlorobenzilate	0.088	0.0767	7
Dicloran	0.028	0.0258	8
Ethion	0.024	0.0241	8
Etrimfos	0.038	0.0376	8
Fenamiphos	0.053	0.0489	8
Fenazaquin	0.25	0.249	8
Flucythrinate	0.025	0.0233	8
Formetanate	0.036	0.0341	7
Imazalil	0.69	0.653	8
Imidacloprid	0.73	0.774	8
Malathion	0.37	0.361	8
Mecarbam	0.031	0.0290	7
Methidathion	0.059	0.0545	8
Monocrotophos	0.032	0.0317	8
Oryzalin	0.022	-	6
Phosphamidon	0.027	0.0225	8
Propiconazole	0.065	0.0626	8
Pyrazophos	0.019	0.0190	8
Tetradifon	0.021	-	6
TFNG	0.14	0.116	8
Thiabendazole	0.82*	0.490	8

* The spiked level is provided for information only. The trueness is not specified for thiabendazole.