

Reference Material Honey-Profiling in honeydew honey

P2528-RMHd



Summary

Reference material P2528-RMHd is validated in method ring test P2528-MRT, which is organised, performed and evaluated according to the requirements of DIN EN ISO/IEC 17043 and the “International Harmonized Protocol” (1,2). ISO 13528 is considered during the evaluation of the submitted results and during homogeneity and stability testing (3). Details related to the applied statistics are summarised in the full specification, which is provided after purchase of the reference material.

Reference material P2528-RMHd consists of 50 g honeydew honey from Spain, which is adulterated with 17 % of an organic rice sirup.

Seven laboratories took part in the method ring test. One laboratory provided two independent results from different spectrometers. Thus, eight different results are considered for each parameter during evaluation.

The assigned values, which are calculated of the results of the participants of the method ring tests P2528-MRT, are summarised in table 1.

Of the 36 parameters of the Honey-Profiling method the parameters of the results related to:

- the sugars fructose, glucose, turanose, maltose, maltotriose, raffinose, and mannose,
- the amino acids alanine, aspartic acid, and proline,
- the organic acids citric acid, malic acid, acetic acid, lactic acid, formic acid, fumaric acid, pyruvic acid, succinic acid, shikimic acid, and
- the honey specific parameters 2,3-butanediol, and ethanol

were evaluated with respect to the comparability criterion ($|z\text{-score}| \leq 2$).

Table 1. Reference material P2528-RMHd – specification

Parameter	Unit	Assigned value	Total number of results
Fructose	g/100 g	28.3	7
Glucose	g/100 g	23.4	7
Turanose	g/100 g	2.34	8
Maltose	g/100 g	6.80	7
Maltotriose	g/100 g	1.17	8
Raffinose	g/100 g	0.659	8
Mannose	g/100 g	0.0648	8
Malic acid	mg/kg	995	8
Alanine	mg/kg	25.4	8
Proline	mg/kg	416	8
2,3-Butanediol	mg/kg	309	8
Acetic acid	mg/kg	126	8
Ethanol	mg/kg	14.0	7
Lactic acid	mg/kg	216	8
Formic acid	mg/kg	86.9	8
Fumaric acid	mg/kg	20.4	8
Pyruvic acid	mg/kg	28.5	8
Succinic acid	mg/kg	213	8
Shikimic acid	mg/kg	195	8