

Validated Reference Material MOSH/MOAH in cocoa powder

P1918-RMCP



- Summary -

Please note:

Reference material P1918-RMCP is a validated control material and not a certified reference material. The reference material consists of 50 g of cocoa powder, which is spiked with the lubricant oil Shell Gadus, which contains MOSH and MOAH (see table 1). The corresponding unspiked cocoa powder (50 g) is free from MOAH (< 0.5 mg/kg) and contains small amounts of MOSH (about 1.6 mg/kg).

The reference material is validated in method ring test P1918-MRT with 16 laboratories. The spiked levels as well as the assigned values, which are calculated of the results of the participants of the method ring test P1918-MRT, 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
Total MOSH (\leq n-C16 to \leq n-C50)	7.4*	8.15	15
Total MOAH (\leq n-C16 to \leq n-C50)	1.3	1.22	11

* The spiked level of total MOSH is provided for information only. The raw material (= blank material contains levels of about 1.6 mg/kg total MOSH and thus the true value in the test material is the spiked level + the levels of MOSH in the raw material.

With respect to total MOSH, laboratories are of course free to calculate the difference between the quantified concentration levels in the blank material and the quantified concentration levels in the test material as an approximation of the true (spiked) level of total MOSH. The difference between the two results should correspond to the spiked level.