

Validated Reference Material MOSH/MOAH in palm oil

P1917-RMPo2



- Summary -

Please note:

Reference material P1917-RMPo2 is a validated control material and not a certified reference material. The reference material consists of 50 g of palm oil, which is spiked with a white oil, which contains MOAH, while it is free from MOSH (see table 1). The corresponding unspiked palm oil is available as blank material P1917-BLPo2 (50 g). The blank material contains MOSH at a level of about 14 mg/kg and MOAH at a level < 3 mg/kg.

The reference material is validated in method ring test P1917-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 P1917-MRT, are summarised in table 1. The spiked level of MOAH is provided for information only. Due to the level of total MOAH in the raw material (< 3 mg/kg), the assigned value is higher than the spiked level. Laboratories are free to calculate the difference between the quantified concentration levels MOAH in the blank material and the quantified concentration levels of MOAH in the test material as an approximation of the true (spiked) level of total MOAH. The difference between the two results should correspond to the spiked levels. Since the white oil, which was used for spiking, does not contain MOSH, the concentration levels of total MOSH in the blank material are identical to the concentration levels in the test material.

Table 1. Spiked levels and assigned values

Parameter	Spiked level [mg/kg]	Assigned value [mg/kg]	Total number of results
Total MOSH (\geq n-C10 to \leq n-C50)	-	14.2	16
Total MOAH (\geq n-C10 to \leq n-C50)	5.6*	6.19	11

* The spiked level of total MOAH is provided for information only.