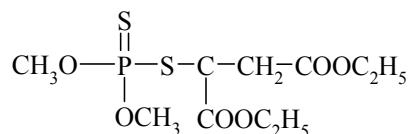


CIPAC .STATUS REPORT

13/06/2005



0012 Malathion

Allocated to WHO/AOAC

CIPAC methods published in :

CIPAC 1, p. 443 (colorimetric)

1B, p. 1849 (GLC)

K, p. 88 (Referee method)

CIPAC 15th meeting, October 1971 in Washington

Very urgent to carry out collaborative work on argentometric method, non-aqueous colorimetric and GLC method.

CIPAC 16th meeting, June 1972 in Stockholm/Lyngby

Collaborative work by AOAC in progress. But CIPAC requested to extend the work by examining samples from different origins and proposed Mr Miles for taking part as co-leader in the AOAC collaborative work.

CIPAC 17th meeting, June 1973 in Wageningen

Decision The non-aqueous colorimetric method (2038) is adopted as provisional AOACWHOACIPAC method to be included in CIPAC 1A, replacing the method already published in CIPAC 1. It is agreed to carry out a collaborative work for comparing both methods (argentometric and non-aqueous colorimetric) on samples from various sources. Dr. Stiles will try to plan this work with Dr. J. Miles.

CIPAC 18th meeting, June 1974 in London

Collaborative work to be carried out by Dr. Stiles and Dr. Miles on the argentometric and non aqueous colorimetric methods (with the help of Dr. Henriët).

CIPAC 19th meeting, June 1975 in Oeiras

Decision Waiting for report of argentometric method. Non aqueous colorimetric method to be published in 1A (draft ?).

CIPAC 20th meeting, June 1976 in Wädenswil

Decision Argentometric method (method to be published in JAOAC in the report of the coll. trial) was adopted as provisional WHOAOACCIPAC method. Non aqueous colorimetric method (CIPAC 1, 4446) was withdrawn. GLC method under study in AOAC, Information Sheet to be sent out.

CIPAC 21st meeting, June 1977 in Braunschweig

Decision Non aqueous colorimetric and argentometric methods (provisional) repealed draft. GLC method (JAOAC) accepted as draft method. Coll. study in progress. Inf. Sheet to be sent out.

CIPAC 22nd meeting, June 1978 in Versailles

Decision The GLC method will be accepted as full WHO-CIPAC method, if no objections are received within 6 months after the distribution of the method.

CIPAC 24th meeting, May 1980 in Salobrena

Dr. Miles reported that Mr. Wayne used chloroform as extraction solvent instead of acetone. The internal standard *m*-diphenoxy-benzene was very expensive, it could be replaced by triamyl phosphate. The filtration step, being tedious, had also been changed. See paper presented at the Symposium 1980.

CIPAC 45th meeting, June 2001 in Bangkok

A report (4245) of a small-scale study of a GC² method (4244) for EW formulations was presented by Mrs Sørensen. The results justified a full study, which would be extended to several formulations. The method could separate isomalathion and maloxon from malathion. Lowering the internal standard concentration would be considered. Suggestions to replace THF (toxicity, explosion hazard) would be considered, but it was doubtful if other solvents could extract malathion from all formulations. Methanol was excluded as solvent due to the possibility of transesterification.

CIPAC 46th meeting, June 2002 in Rome

Dr Sørensen presented the results of a collaborative study of the capillary GC method for the determination of malathion in technical material (one sample) and four formulations (1 DP, 1 EC and 2 EW). Results were submitted from 24 laboratories.

It was noted that there were a number of minor amendments made to the method by participants but that the method remained satisfactory and robust.

It was discussed whether the capillary method should replace the existing method and it was noted that the existing packed column method could determine malathion in WP formulations. The status of the existing method will be discussed at the next CIPAC meeting.

CIPAC 47th meeting, June 2003 in Bucharest

Decision The capillary GC method for malathion technical, EC, EW and DP, CIPAC/4268, has been accepted as **full** CIPAC method, and referee method for TC, EC, EW, and DP formulations.