CIPAC STATUS REPORT

16/09/2020

$$\begin{array}{c|c} \text{Cl} & \text{NH-CH(CH}_3)_2 \\ & \text{NNNN} \\ & \text{NH-C}_2\text{H}_5 \end{array}$$

0091 Atrazine

Allocated to CH

CIPAC methods published in:

CIPAC 10th meeting, June 1966 in France

Dr. Zäch said that there had been minor changes and additions made to method 482, and the revised method would be written in CIPAC form with a view to starting collaborative trials. Samples of US products should be included.

CIPAC 11th meeting, June 1967 in London

<u>Decision</u> In absence of any report from Switzerland it was agreed to defer consideration of this item until the next meeting when presumably Dr. Zäch's successor would have carried out some trials of the proposed method.

CIPAC 12th meeting, June 1968 in Braunschweig

Mr. Schechter reported that there was an AOAC method, and a new Associate referee (Mr. Robert T. Murphy, Geigy Chem. Corp. USA) Dr. Weinmann said that although the method had one difficult step it was satisfactory.

CIPAC 14th meeting, June 1970 in Gembloux

<u>Decision</u> The method for atrazine (1491) was adopted as provisional CIPAC method on the basis of its reproducibility shown by the results of collaborative work but the Committee felt the necessity to add a method for qualitative or preferably quantative identification and requested Dr. Bosshardt to initiate work on the TLC method proposed by Stamback and al. In the meantime, the Committee insisted that the work on a GLC method under the leadership of AOAC should be continued.

CIPAC 15th meeting, October 1971 in Washington

<u>Decision</u> The Committee adopted the GC method (1784) as AOACCIPAC method, and the titrimetric method (1491) as an alternative <u>provisional</u> CIPAC method when total herbicidal compounds are involved.

CIPAC 16th meeting, June 1972 in Stockholm

Dr. Eberle, Expert Witness, presented the report 1831 on the present status of triazine analysis in CIPAC and AOAC.

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CIPAC 17th meeting, June 1973 in Wageningen

<u>Decision</u> The revised documents (19201921) to be published in CIPAC 1A with some corrections. They include the AOACCIPAC GLC method as full and referee method and the total herbicidal triazines (by total chlorine) as provisional CIPAC method.

CIPAC 18th meeting, June 1974 in London

<u>Decision</u> Work completed. Methods 1920M and 1921M to be published as <u>full</u> methods in 1A.

CIPAC 63rd meeting, June 2019 in Braunschweig

Atrazine by Mr William Meyerhoffer (5215, 5216)

Mr Meyerhoffer presented the results of a large scale CIPAC collaborative trial for the determination of atrazine in two TCs and one WG and two SC formulations. The method consisted of a single extraction with acetone, adding of dipropyl phthalate (as I.S.), and sonication followed by gas chromatographic separation on a capillary column (DB-225 or equivalent) and FID detection. Typical retention times were approx. 9 min. for atrazine and approx. 6 min. for dipropyl phthalate. However a DB1701 type of capillary column can also be used.

Samples were sent to 16 participants in Europe, Asia, and the Americas and 15 participants returned results in time. The reported method deviations were deemed not to affect the analytical results. The data were subjected to Mandel's test and k and h outliers and/or stragglers were identified in TC-A (lab 3), TC-B (lab 16), WG-C (Lab 3), and SC-D (lab 13). Horwitz criteria were met for all five samples whether or not the outliers and stragglers were included. Unfortunately, no HorRat values were reported.

The organizers recommended that the method should be accepted as a provisional CIPAC method with potential inclusion of DB-1701 capillary GC column as an alternative to the proposed DB-225 column

The following comments were received from the meeting:

 Mrs Tessier remarked that one participant applied only the multimethod as proposed by Mr Garvey and Mrs Mary Ellen McNally.

Closed Meeting:

A large scale trial was presented and the method can be promoted to a **provisional CIPAC method**. However, it was requested that the result of the applied multimethod should be removed from the data set which was agreed upon by the meeting. In addition, the HorRat-value for the trial should be calculated and in case that the results need a justification, this should be provided to the CIPAC secretary

CIPAC 64th meeting, June 2020 virtual (Geneva, Corona)

The capillary GC method using internal standard (CIPAC/5215) for the determination of atrazine in TC, WG and SC formulations was accepted as a **full** CIPAC method, with the request to remove the data set obtained with the multi-method and inclusion of the HorRat values.