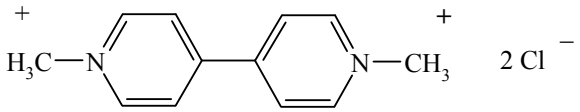
CIPAC STATUS REPORT

27/06/2005



0056 Paraquat

Allocated to GB

CIPAC methods published in :

CIPAC 1, p. 547 (UV)
CIPAC 1A, p. 1317 (corr.)
CIPAC E, p. 75 (+ diquat, UV)
CIPAC E, p. 166 (UV)
CIPAC G, p. 128 (Identity tests)

CIPAC 15th meeting, October 1971 in Washington

Decision. The methods of analysis (1751) for diquatparaquat water soluble granules, supported by report 1750, are adopted as full CIPAC methods.

CIPAC 16th meeting, June 1972 in Stockholm

Decision. The revised method 1874 and the method for the determination of free 2,2'bipyridyl (1874), supported by the report (1873), are adopted as full CIPAC methods.

CIPAC 17th meeting, June 1973 in Wageningen

Decision. Paraquat dichloride is retained as standard, supported by report 1950.
Revised method 2073 as full method to be published in 1A.

CIPAC 26th meeting, May 1982 in Rome

Mr Declercq reported that due to a large number of samples he was forced to use another method, which was a reversed phase HPLC method. The chairman asked that both sides should inform each other. Mrs Hitos said to use a ion-pair HPLC method.

CIPAC 30th meeting, June 1986 in Vienna

The Scandinavian progress report (CIPAC/3316) described the conditions for a HPLC method.

CIPAC 38th meeting, July 1994 in Annapolis

Mr Parker introduced an identity test for paraquat, CIPAC/3809/m. The test will be published with a reference to the method published in CIPAC E. The specification will have to be republished with a reference to the identity test.

CIPAC 51th meeting, June 2007 in Umhlanga Rocks, South Africa

Mr Rodler presented the results on the content of terpyridines on diquat and paraquat formulations.

Part 2: Paraquat and its SL formulations

FAO specification for paraquat TK has been established. In paraquat SL formulations, terpyridines are also present as impurities. The same analytical method was used.

Paraquat peer review results: Recoveries were poor for the TK, specifically for US and UK laboratories. Poor recovery was also experienced with SL formulations.

Conclusion

Paraquat TK: Because a better peer validated method already exists, it is recommended that this method be not adopted.

Paraquat SL formulations – it is recommended that this method for determination of terpyridines be adopted as part of FAO specification.

Decision The independent laboratory validation of the HPLC-tandem mass spectrometry method for determination of residues of the relevant impurity terpyridines in paraquat TK and SL formulations was noticed and regarded to be suitable for the determination of the relevant impurity terpyridines in SL formulations , subject to clarification of certain points.